

1/56

FIG. 1



FIG. 2

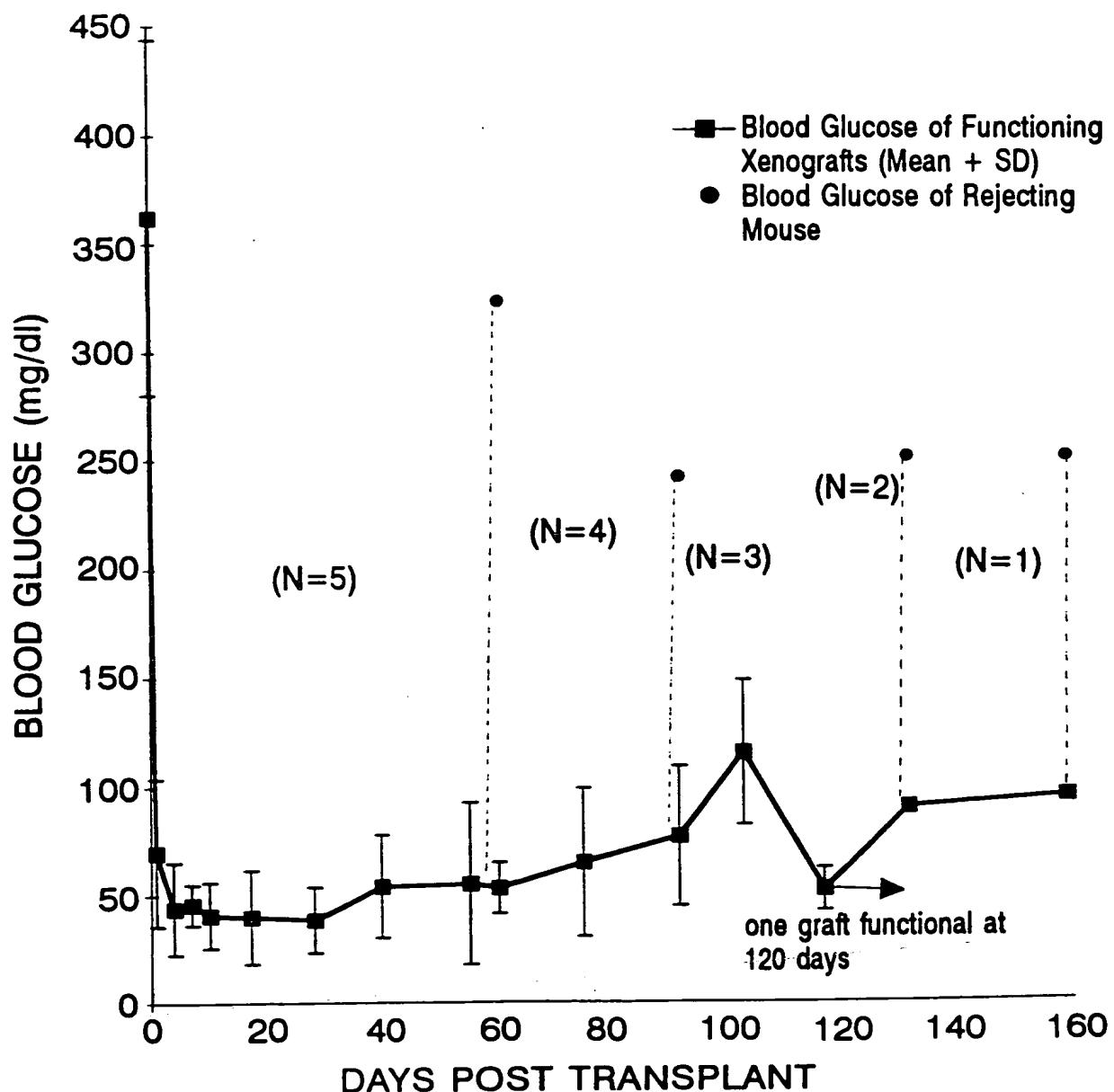


FIG. 3

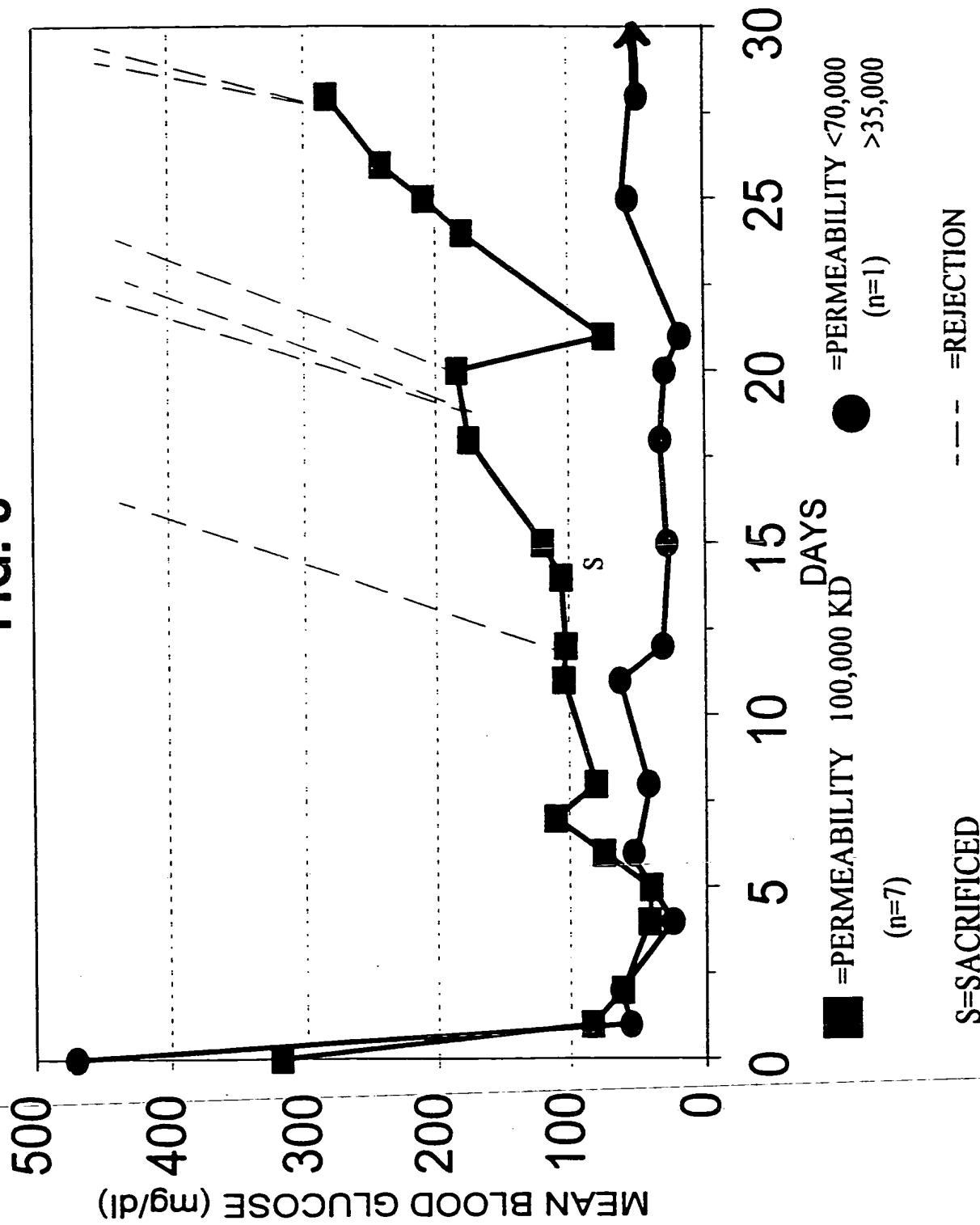


FIG. 4

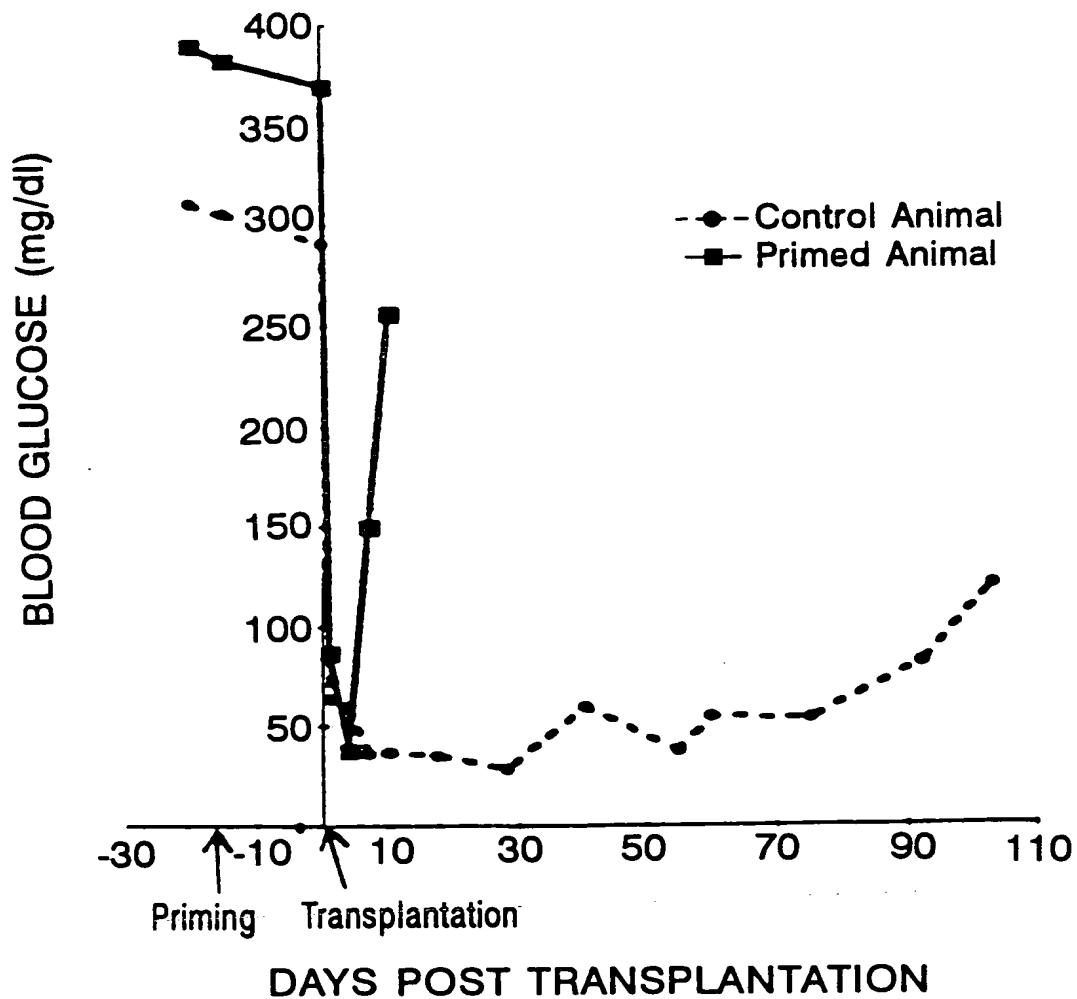
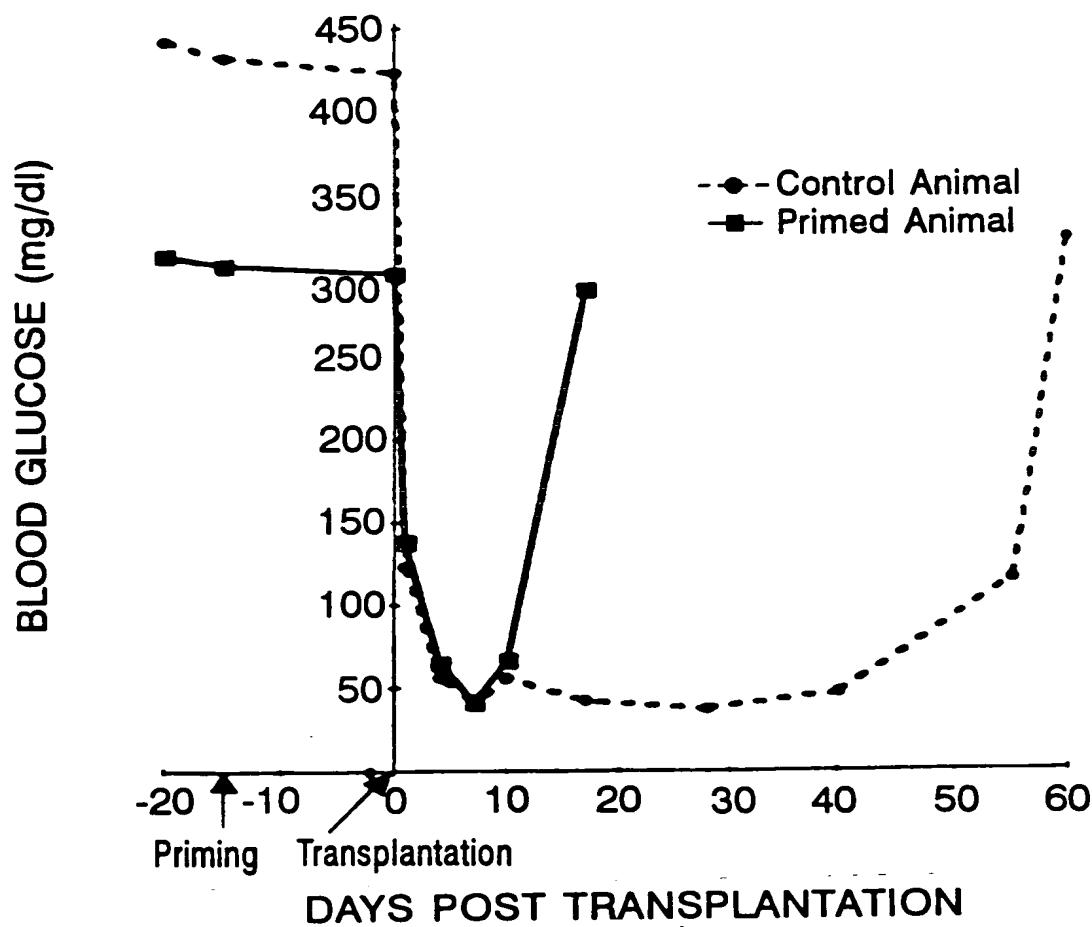


FIG. 5



6/56

FIG. 6



7/56

FIG. 7



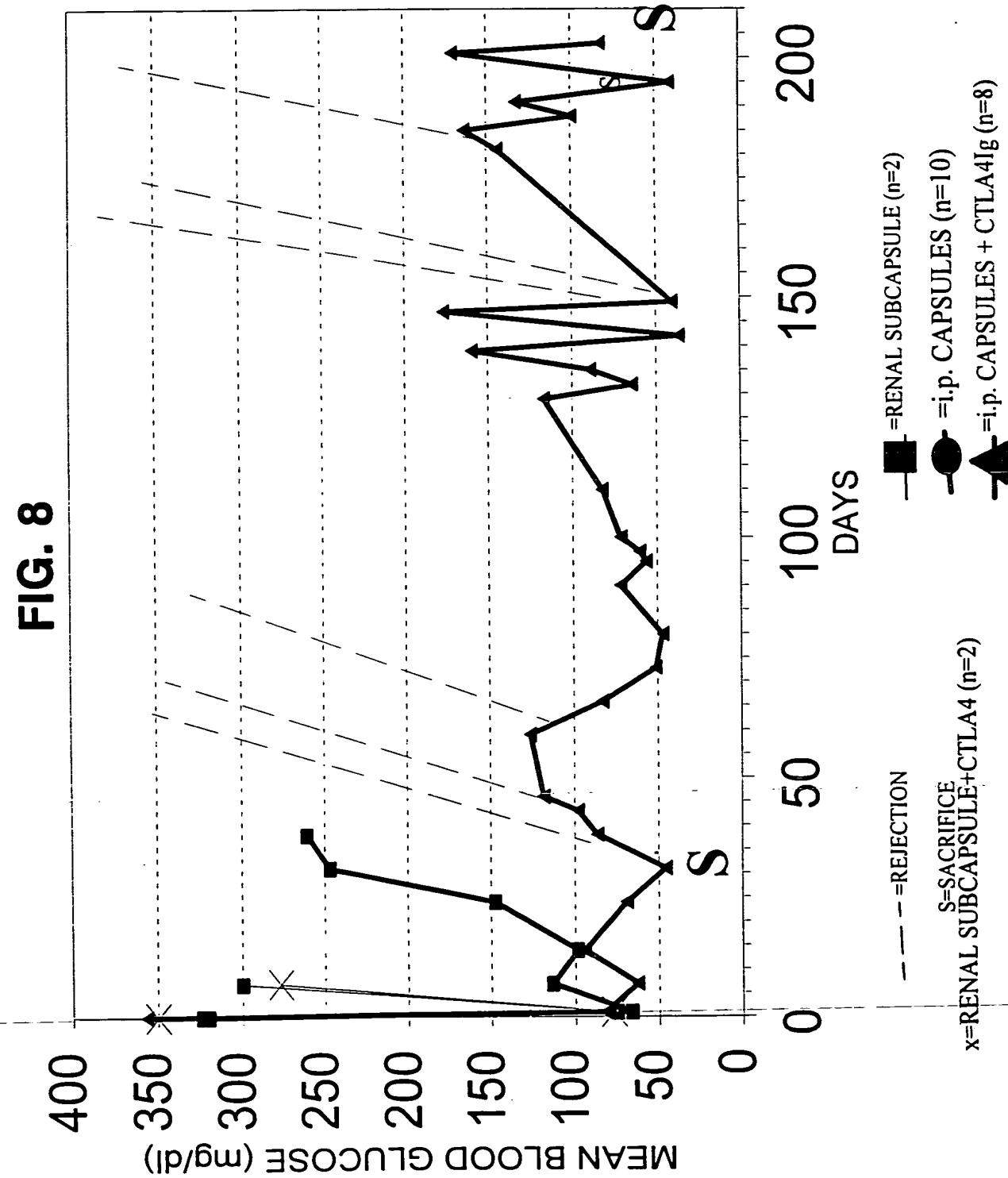


FIG.

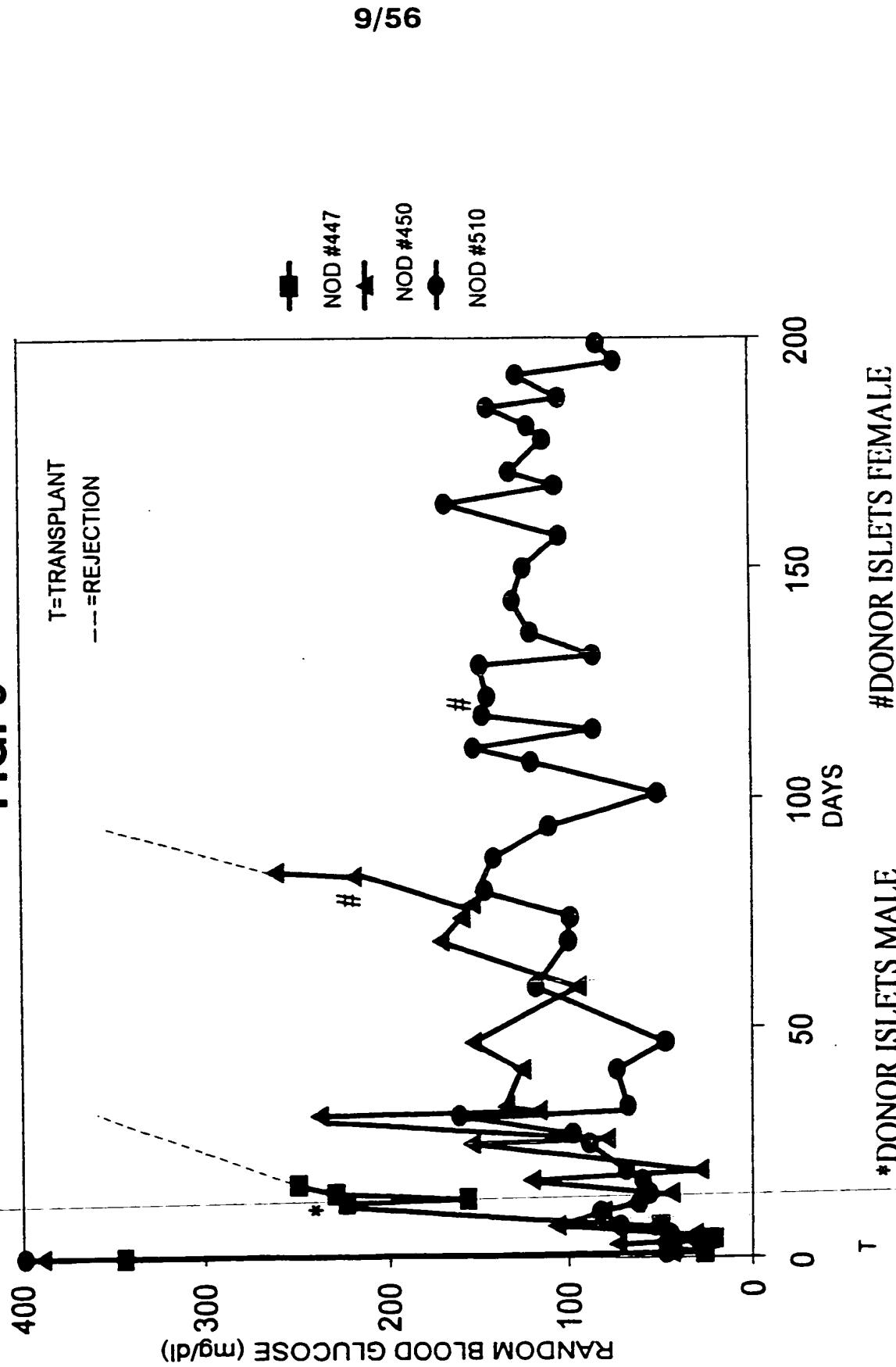


FIG. 10

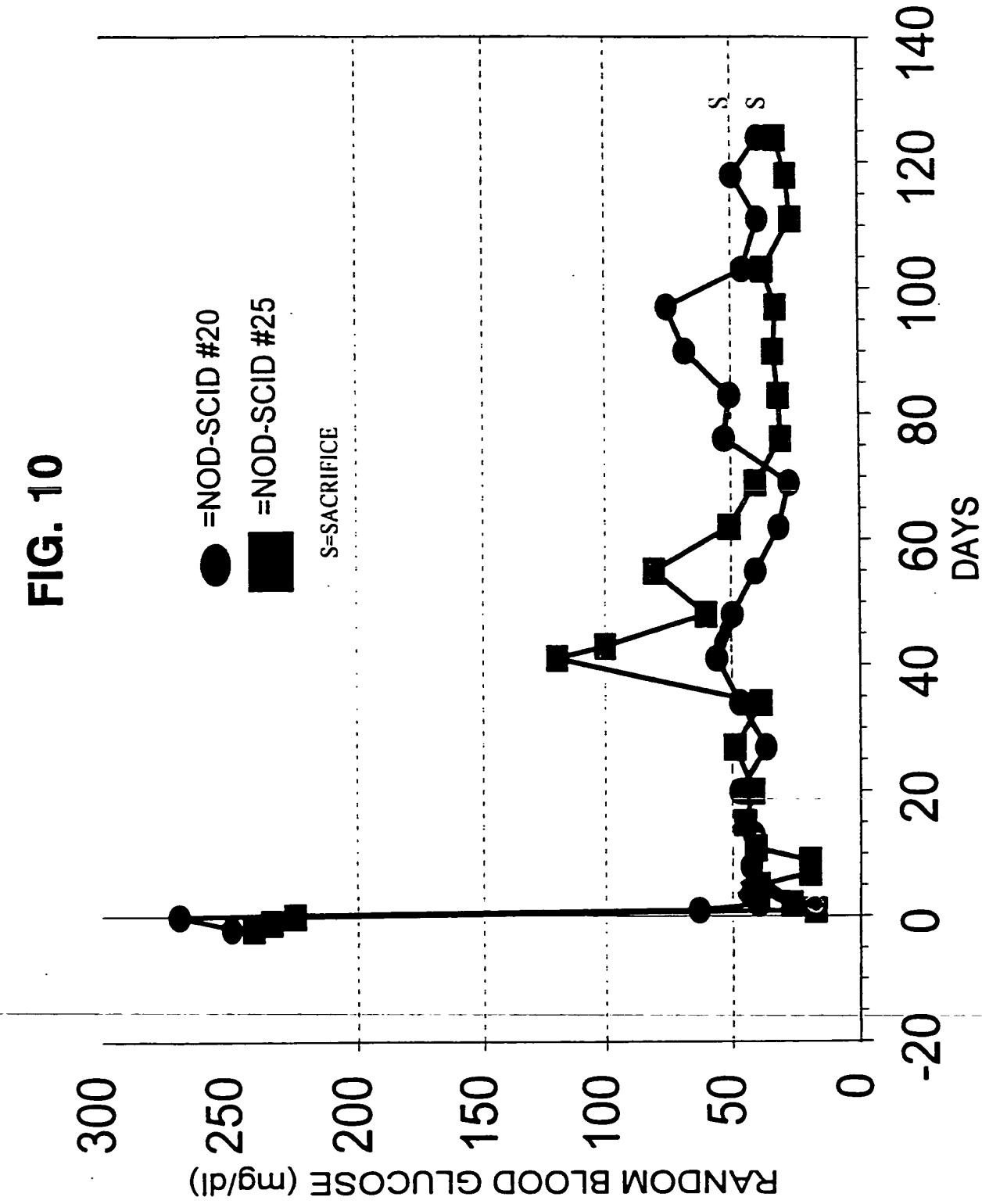
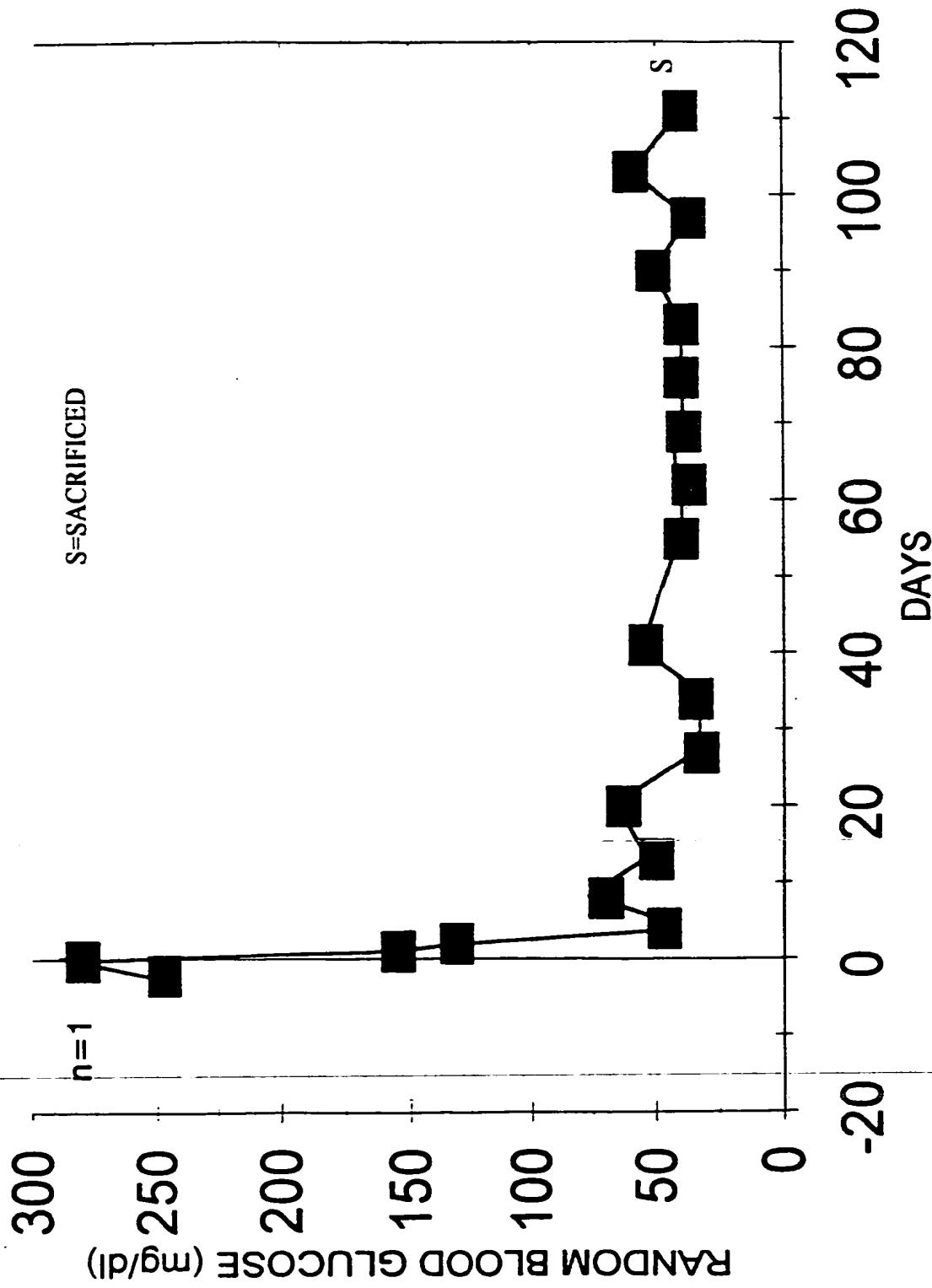
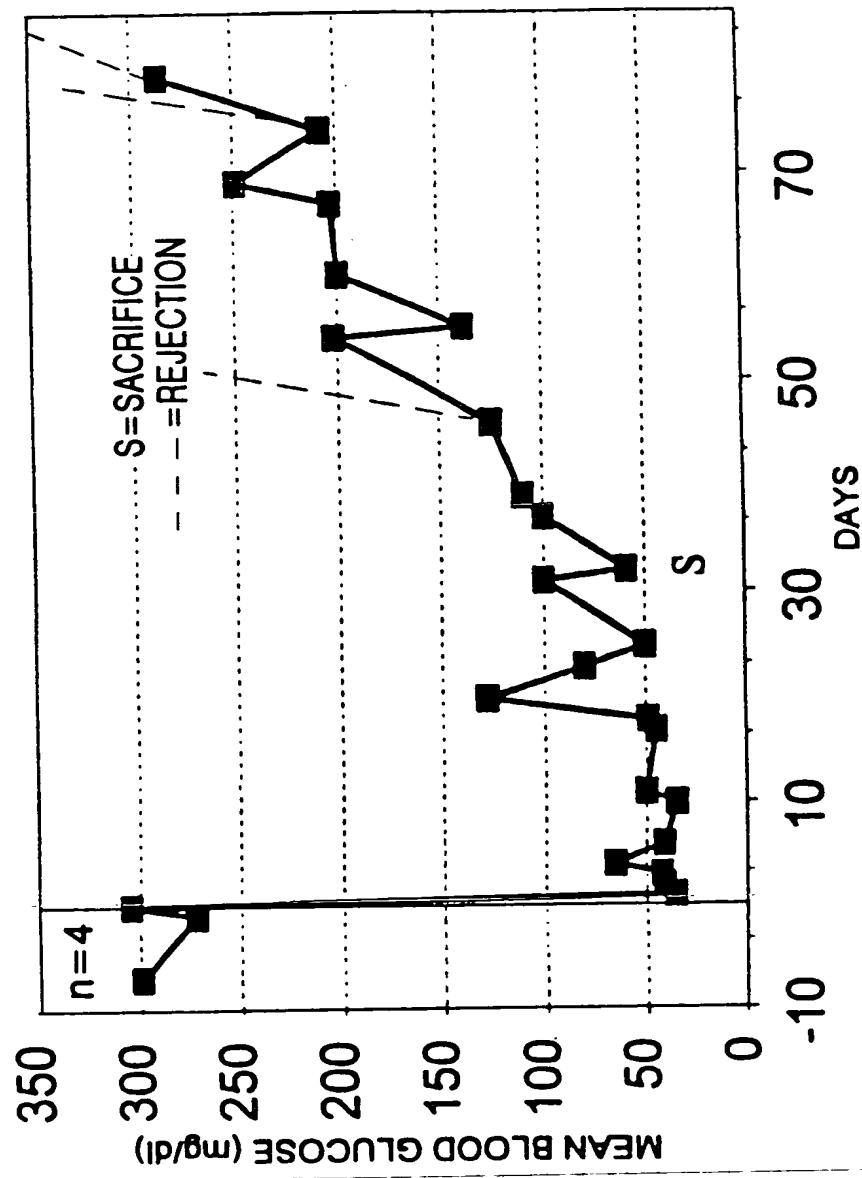


FIG. 11



**FIG. 12**



13/56

FIG. 13



**FIG. 14**

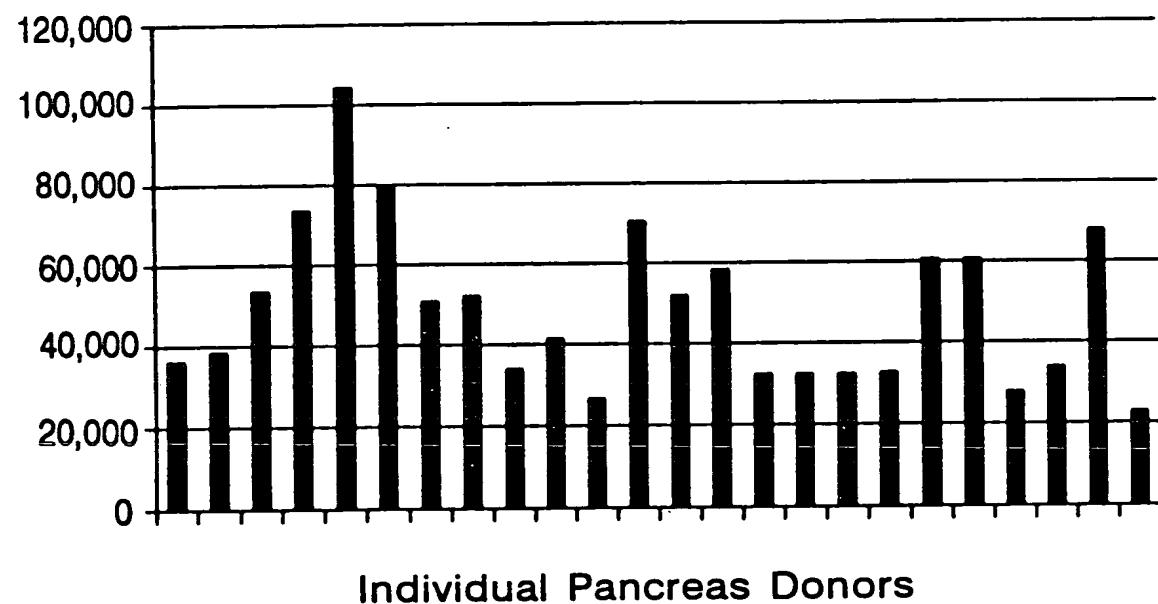
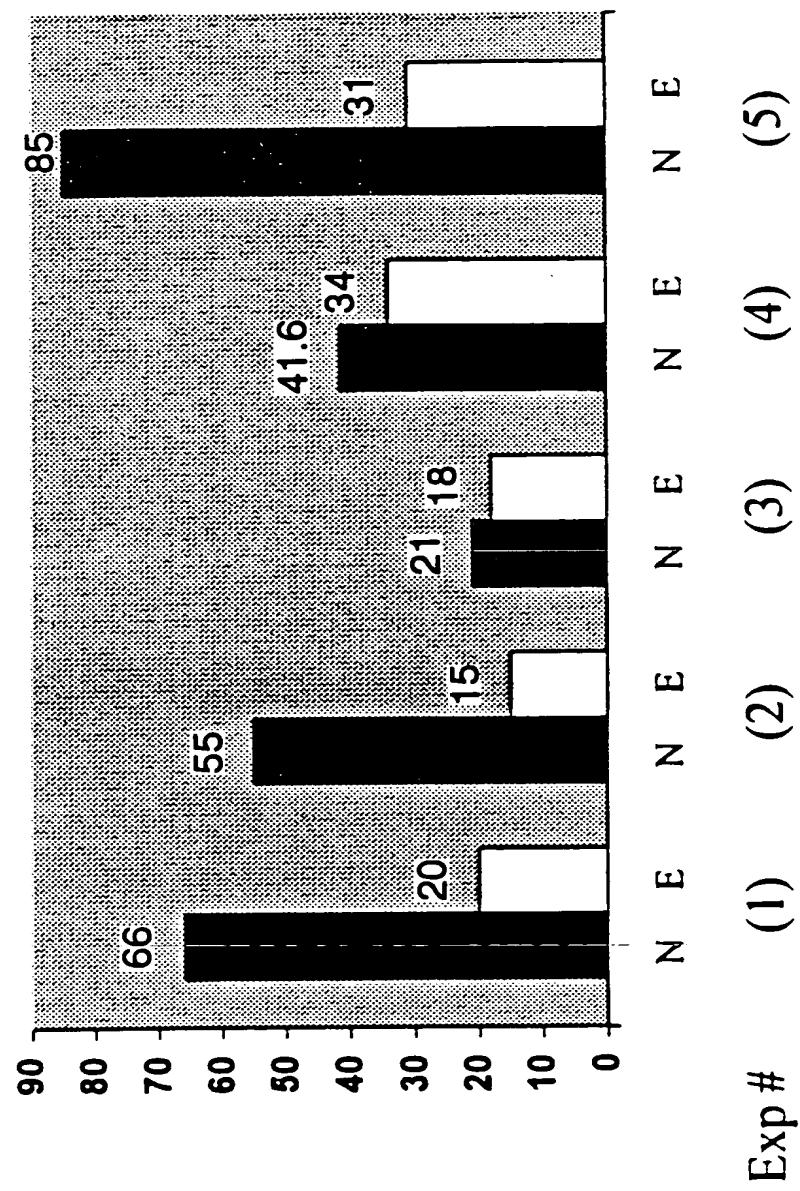
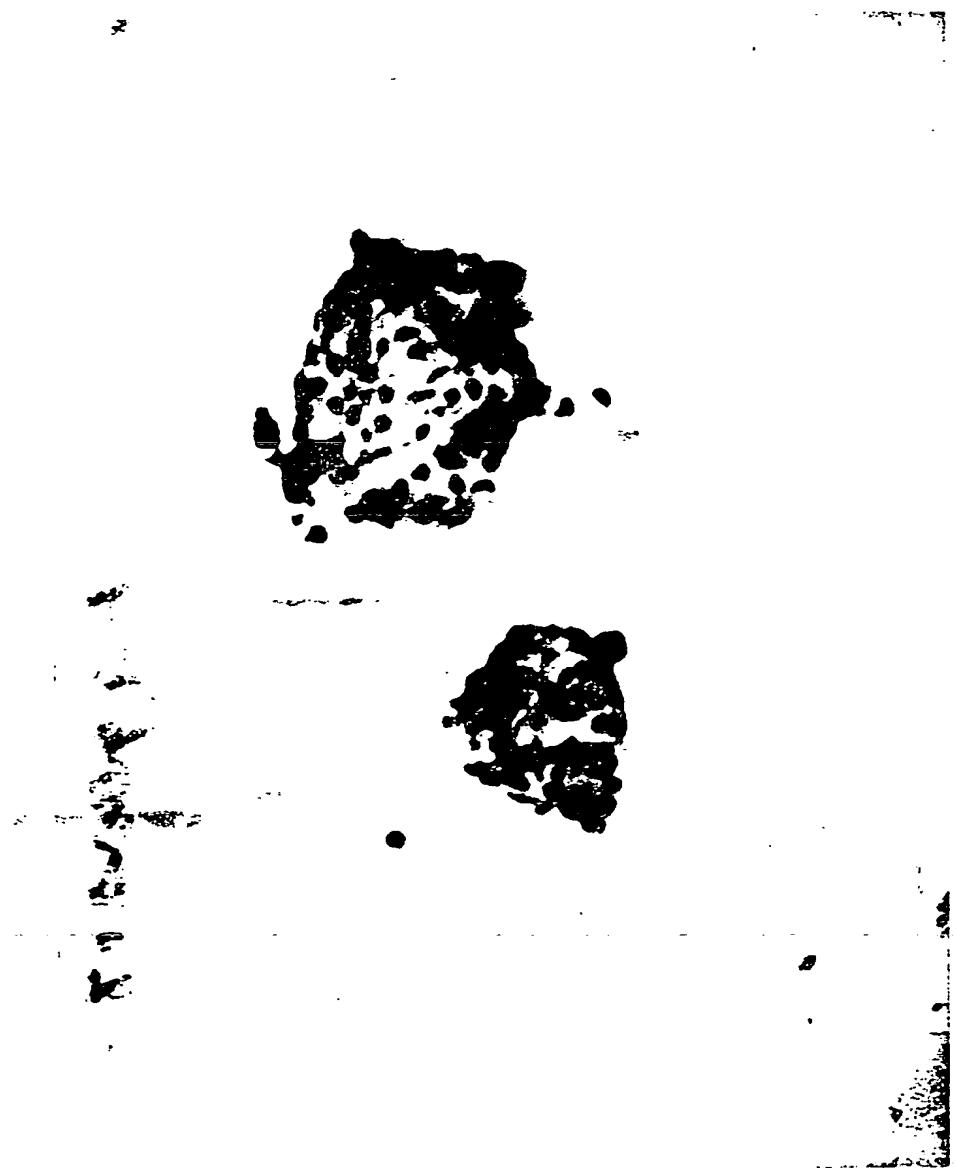


FIG. 15



16/56

**FIG. 16**



17/56

**FIG. 17**

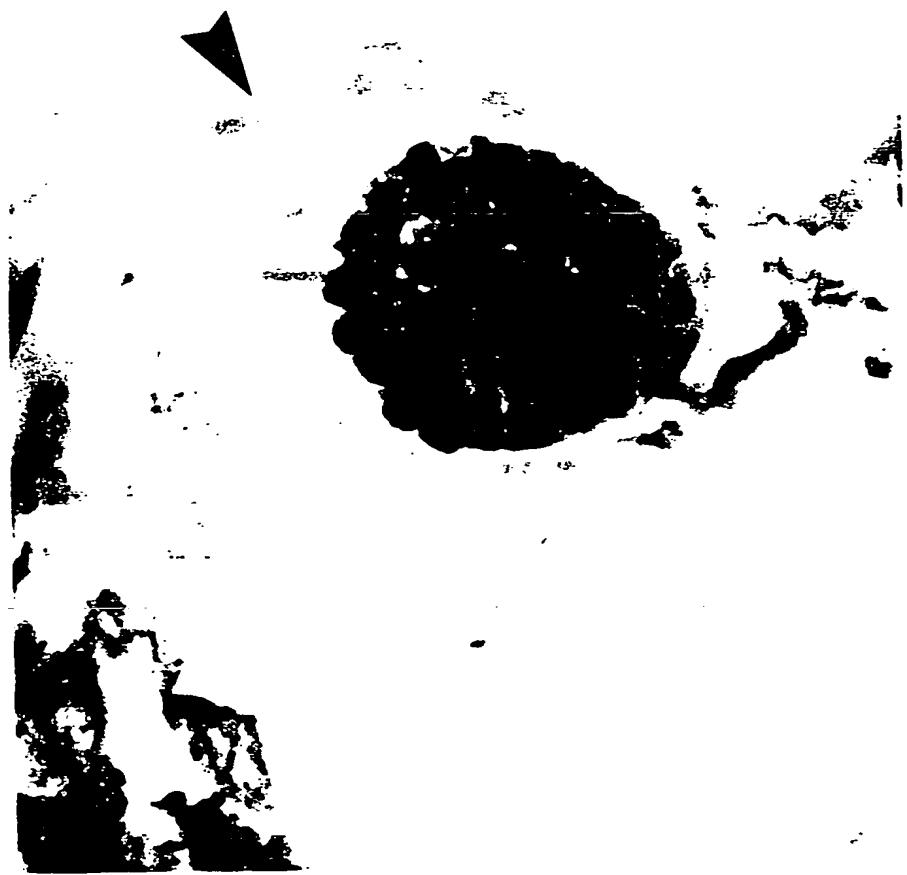


FIG. 18

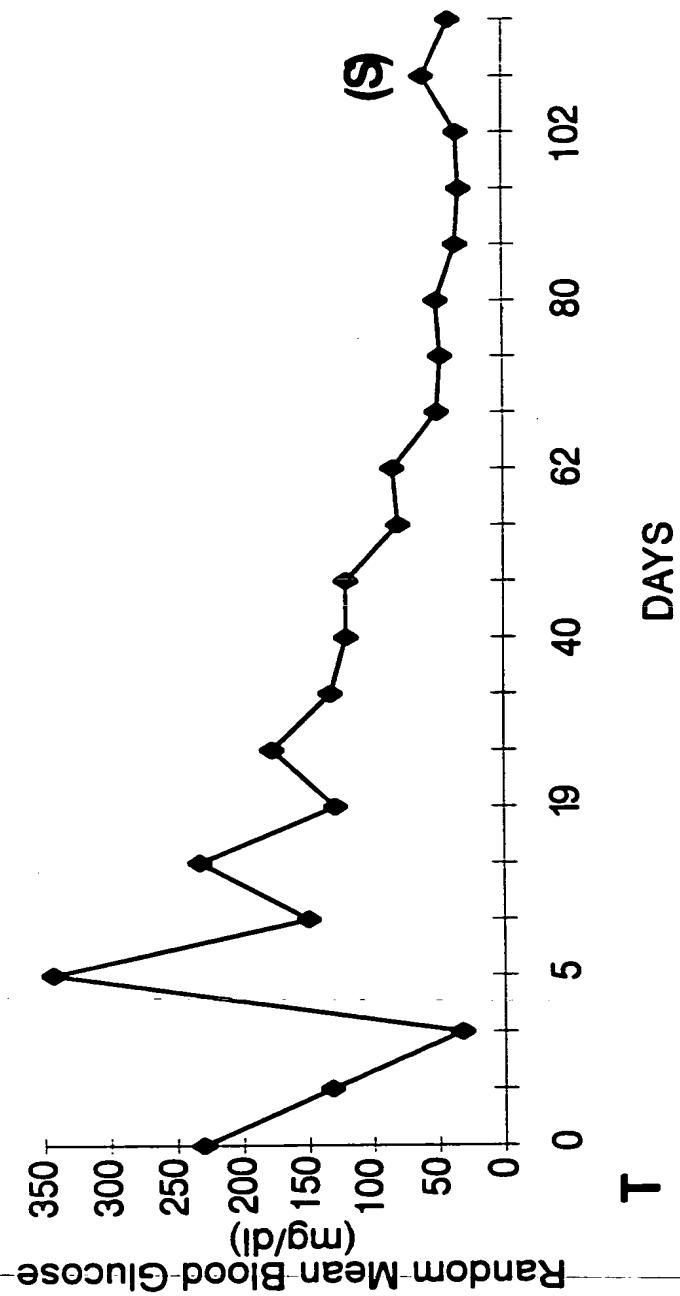
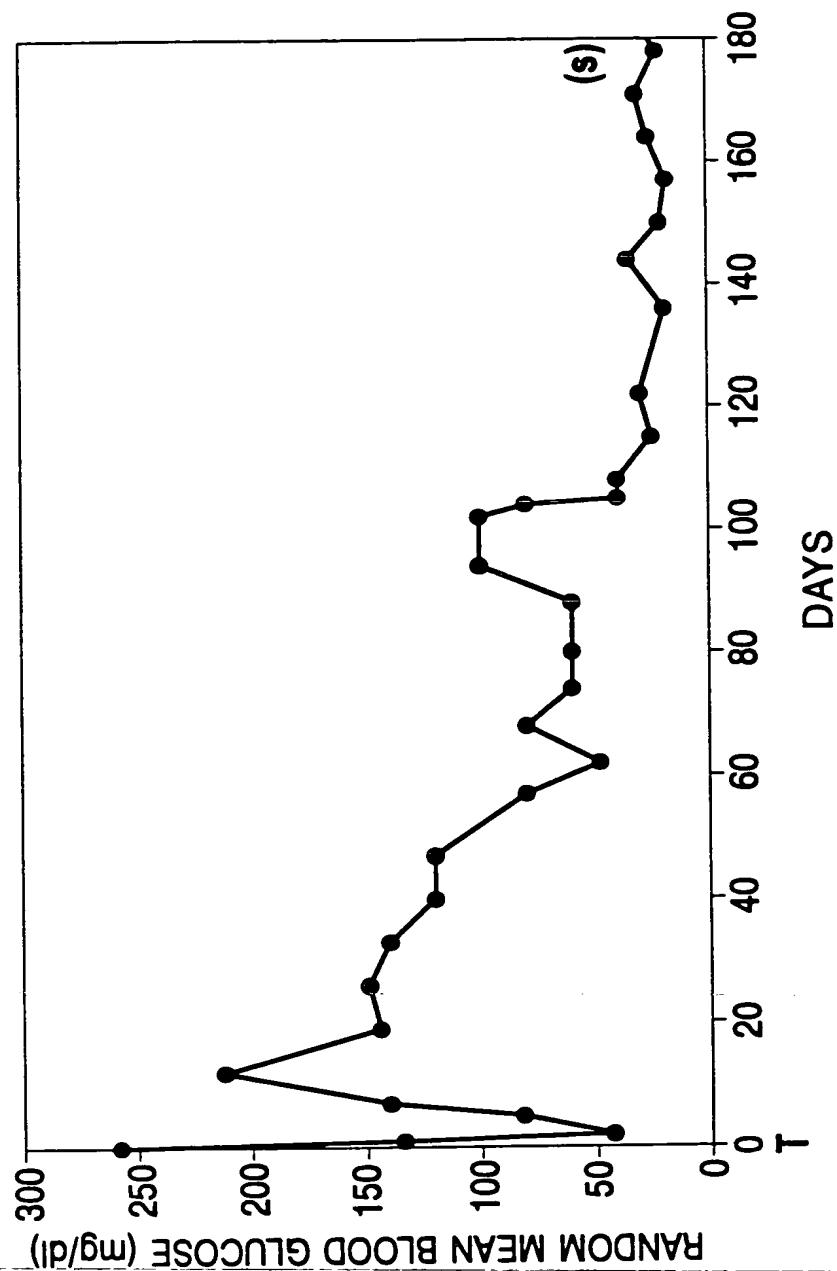


FIG. 19



20/56

FIG. 20

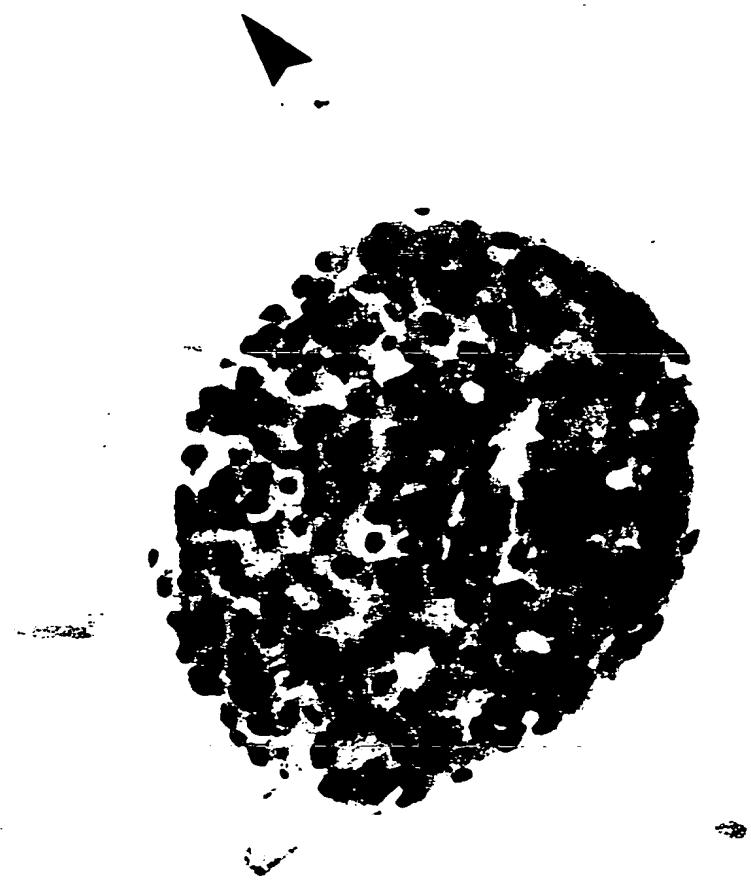
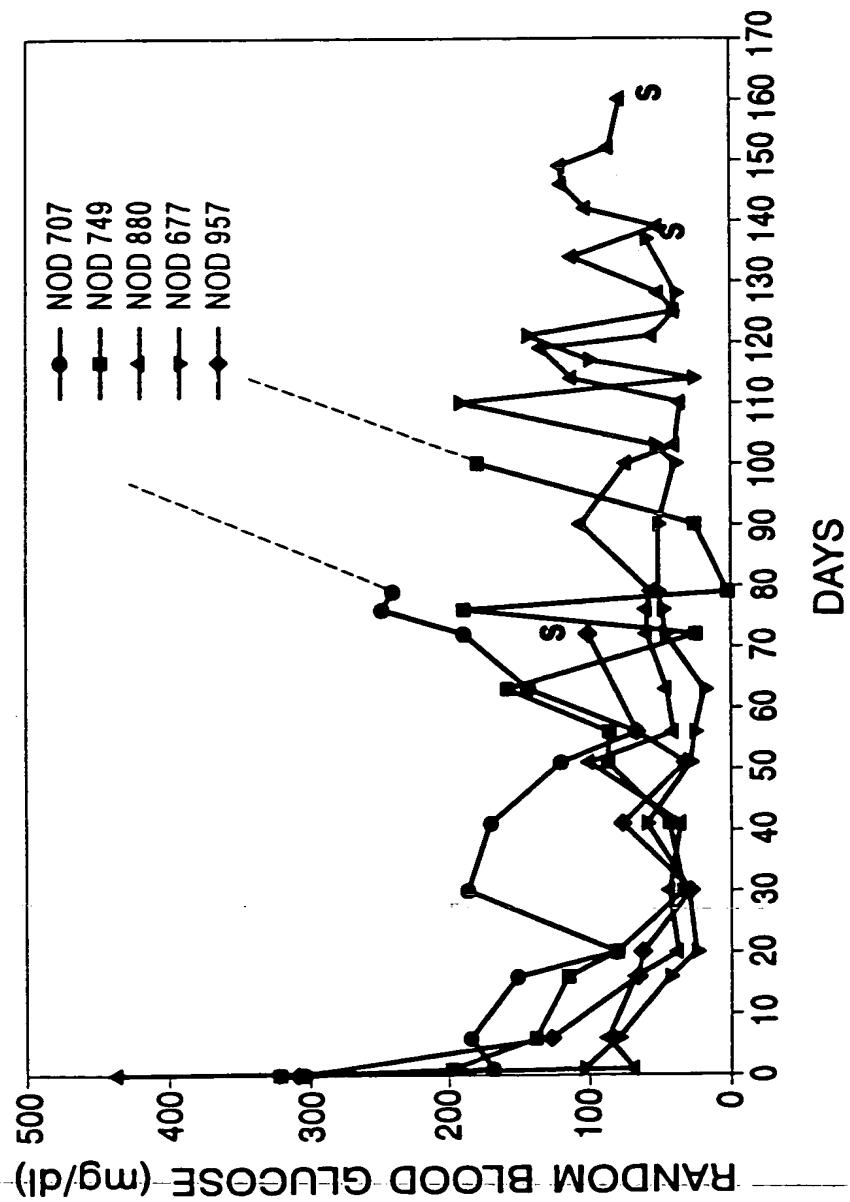


FIG. 21



22/56

FIG. 22



**23/56**

**FIG. 23**

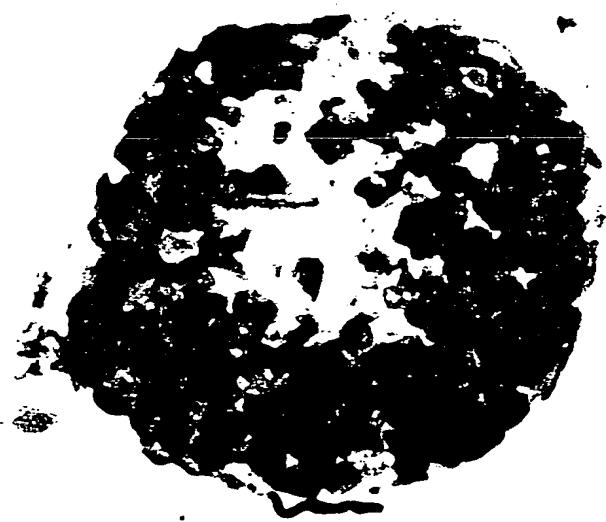


FIG. 24

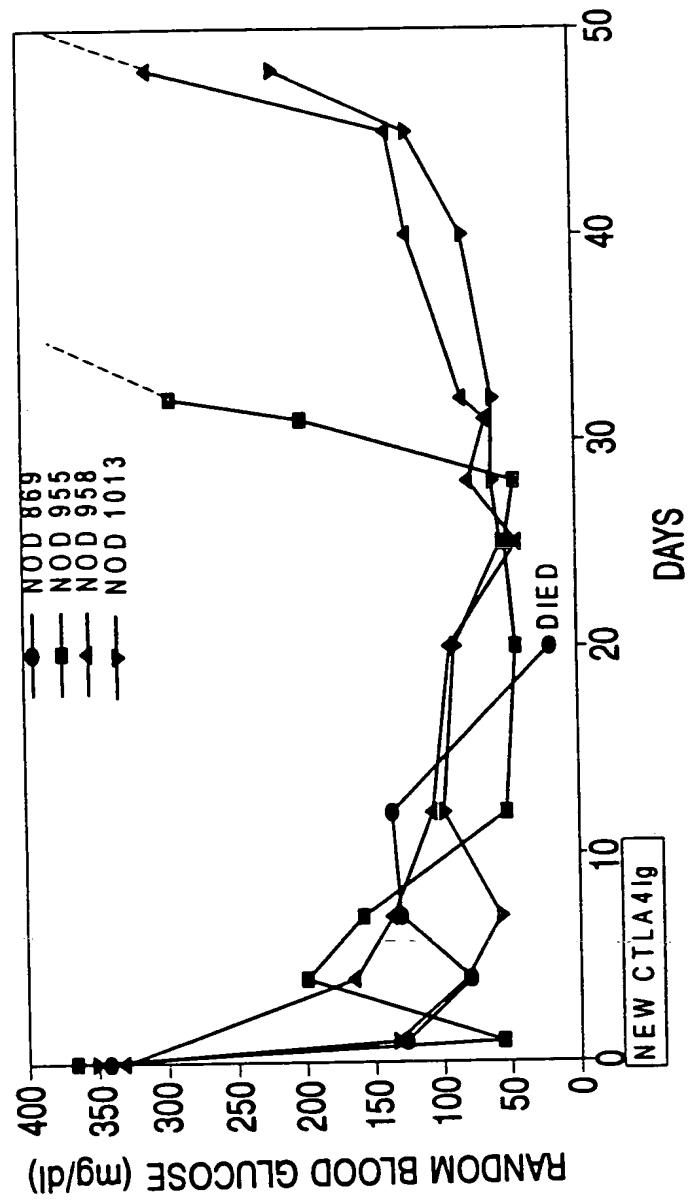


FIG. 25A

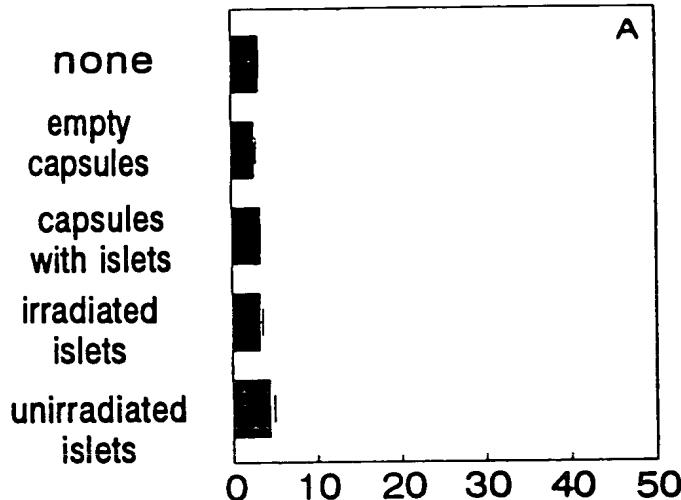


FIG. 25B

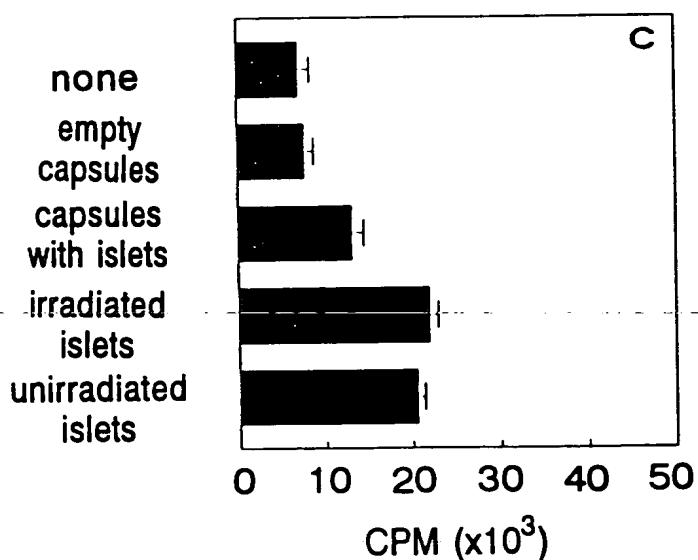
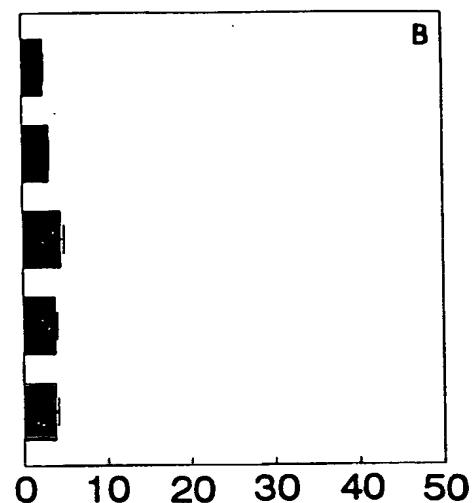


FIG. 25C

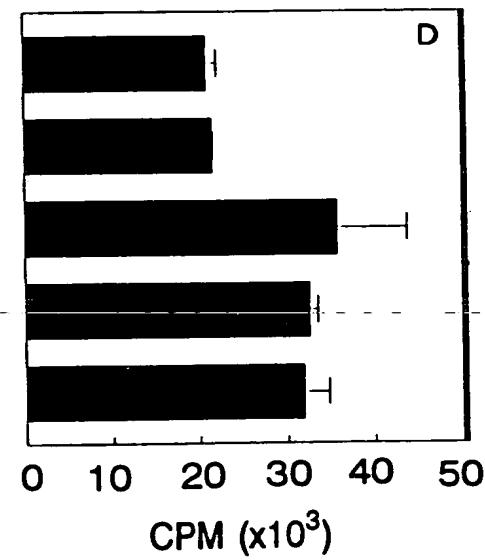


FIG. 25D

FIG. 26

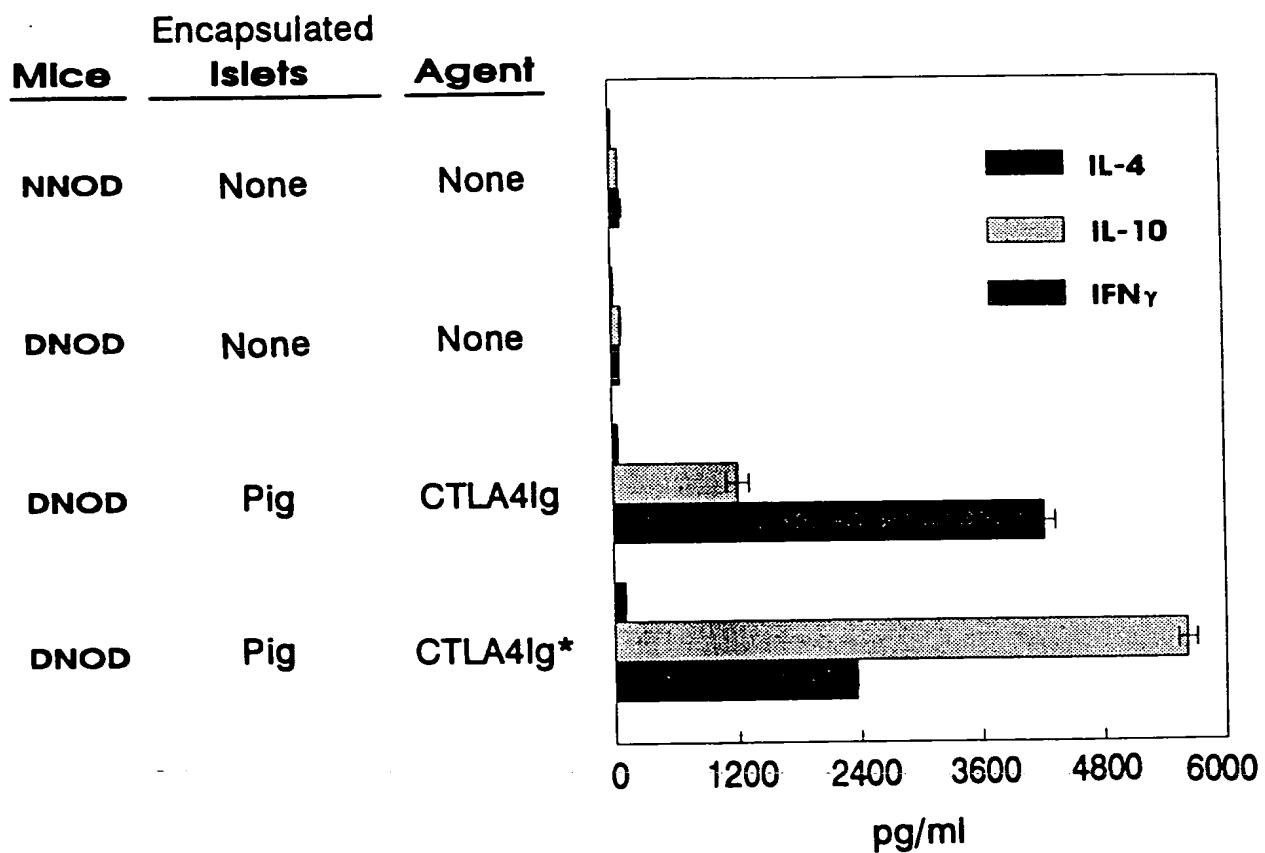


FIG. 27

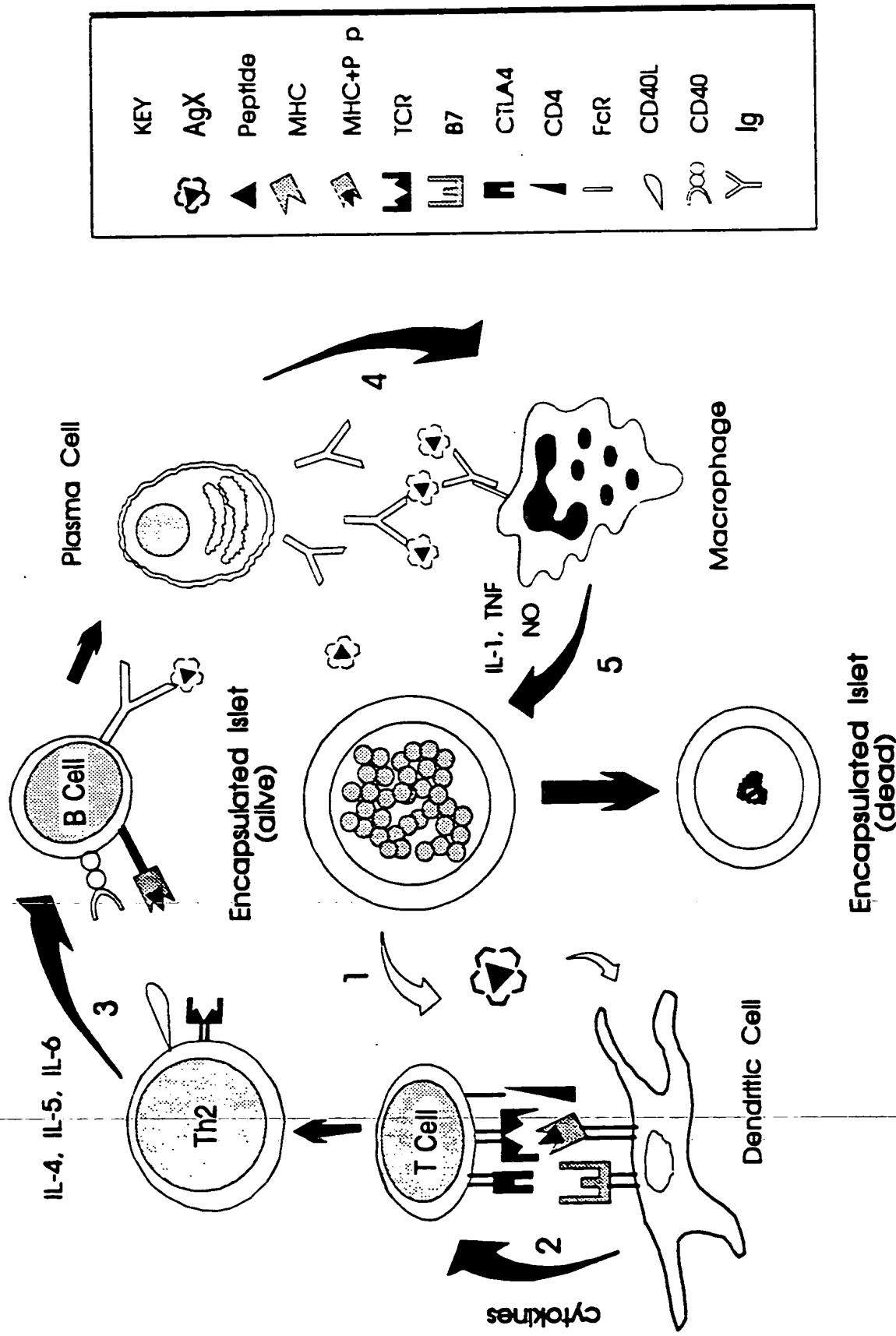
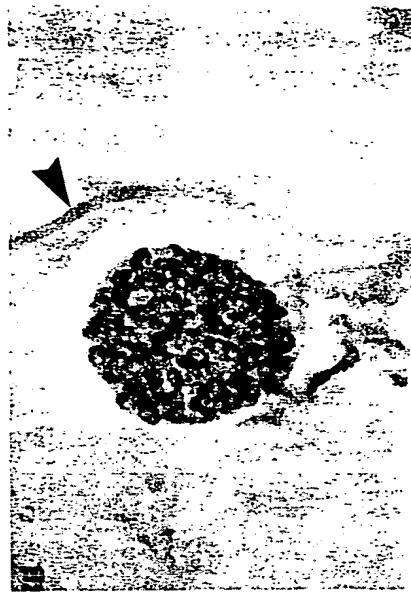
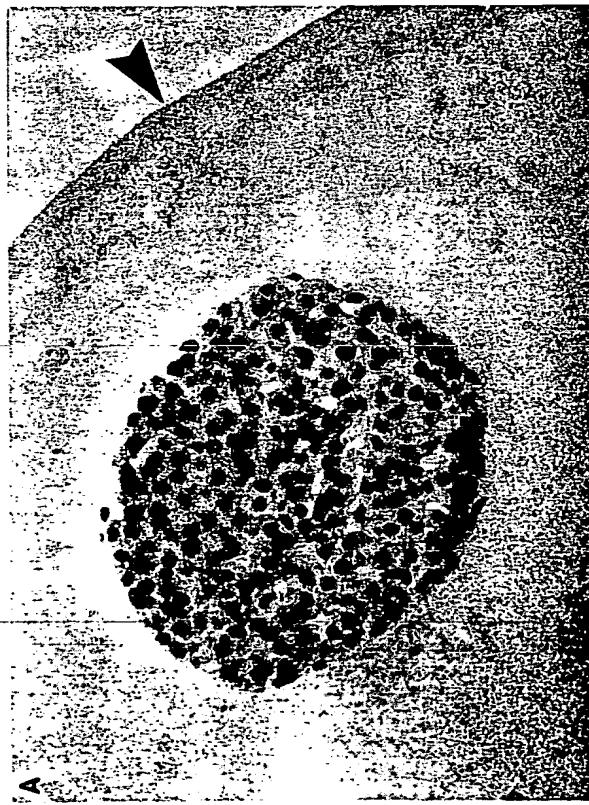


FIG. 28A  
FIG. 28B



29/56

FIG. 29B



FIG. 29A

30/56

FIG. 30

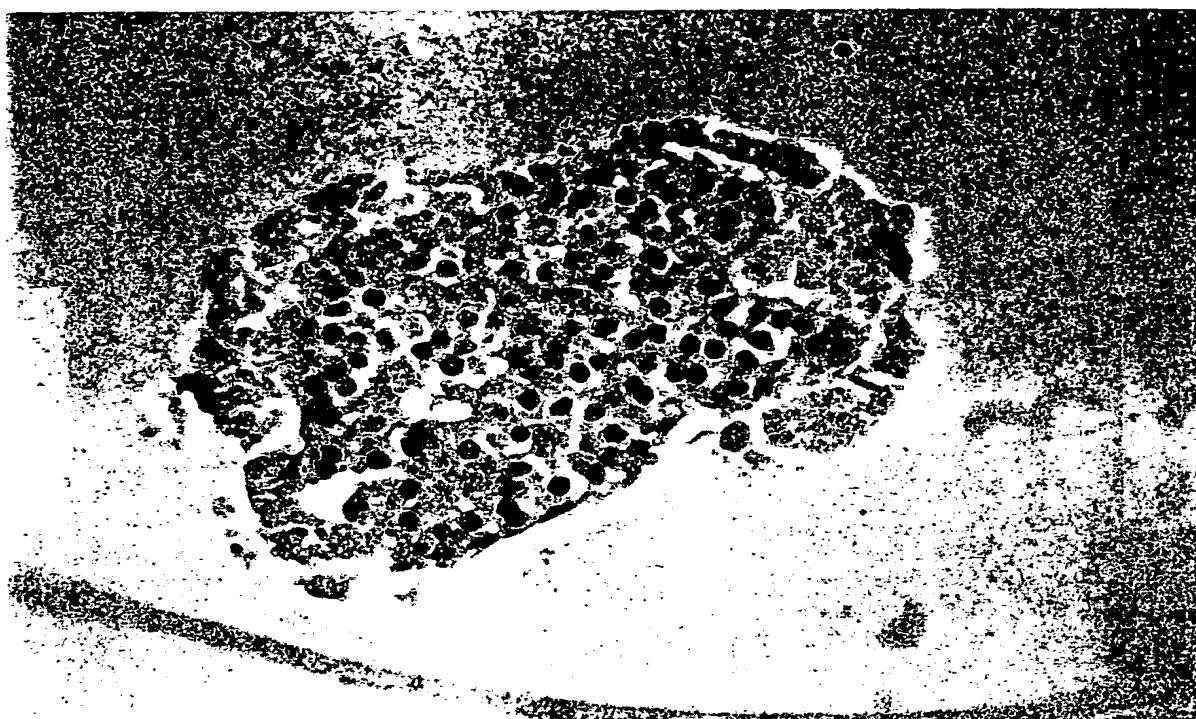


FIG. 31



FIG. 32

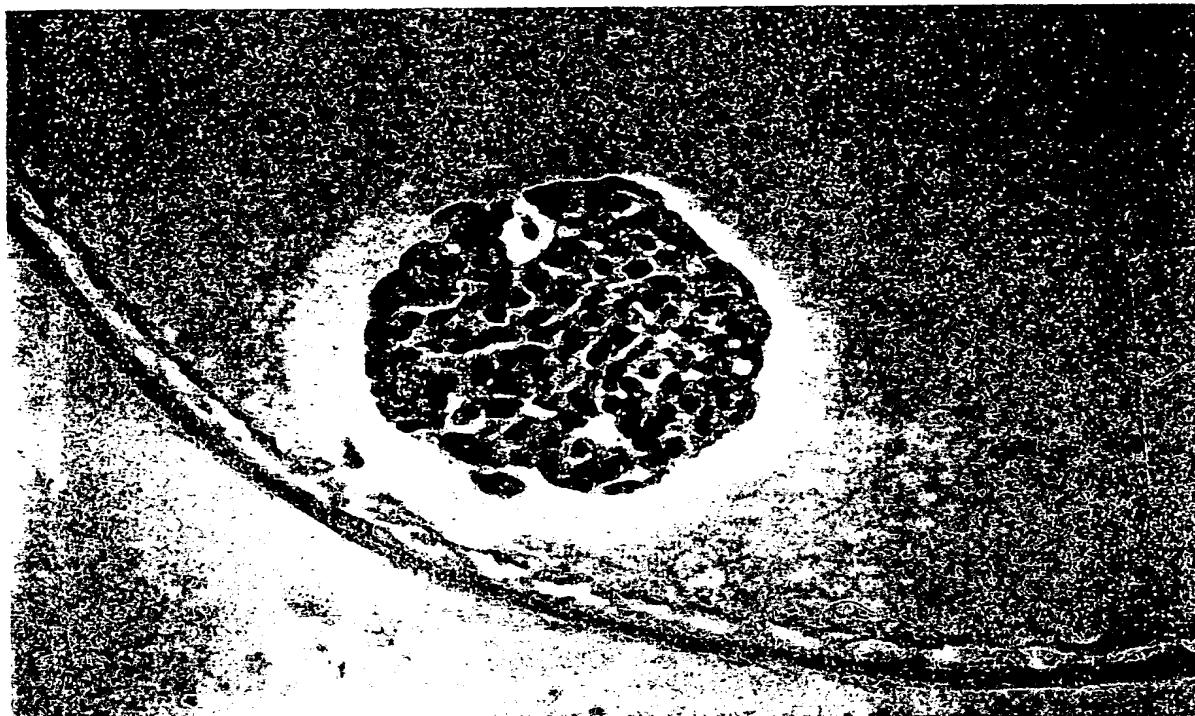
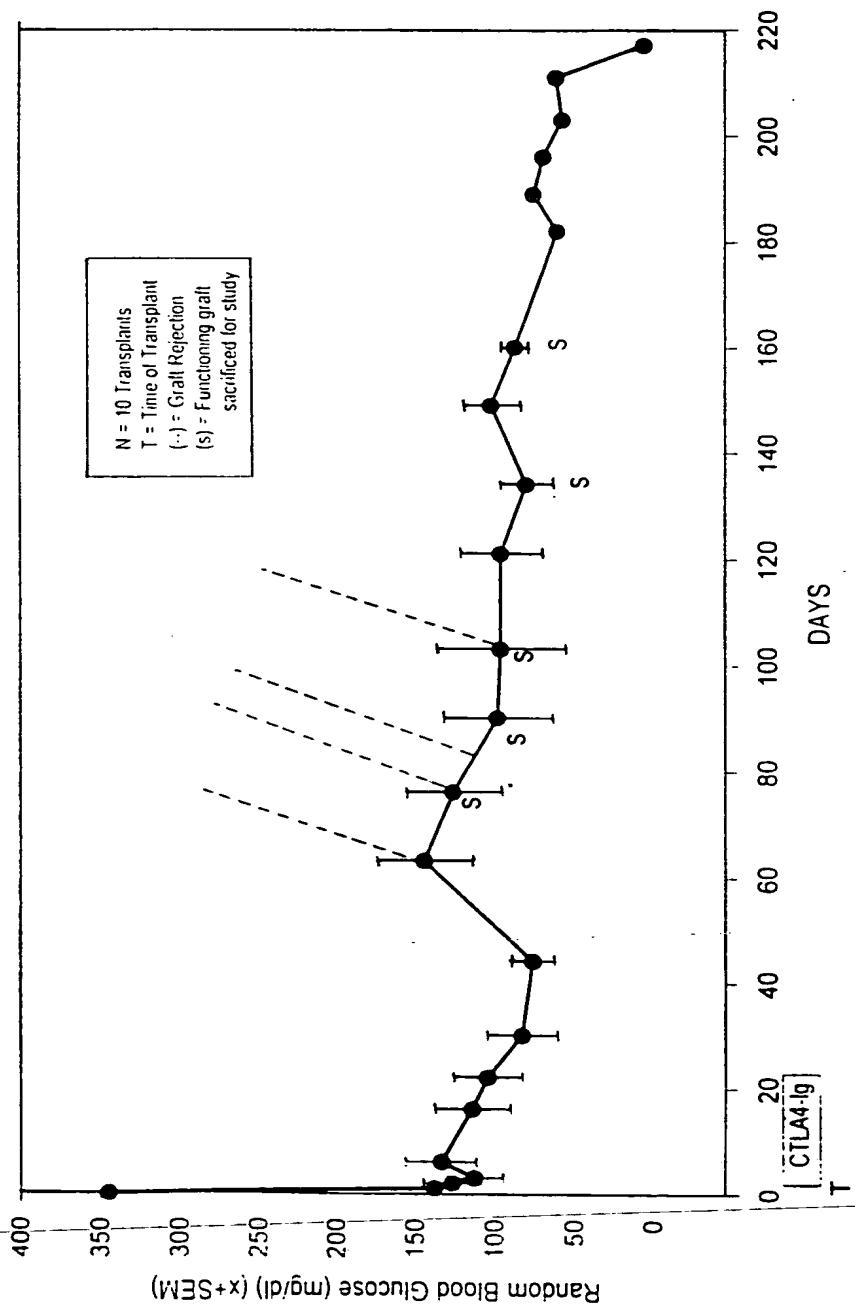


FIG. 33



**FIG. 34**  
**Microencapsulated Neonatal Pig Islet Transplants Into Diabetic NOD Mice  
Treated with CTLA4-Ig for 21 Days**



**FIG. 35** Microencapsulated Neonatal Pig Islet Transplants into Diabetic NOD Mice Treated with mutant CTLA4-Ig for 21 Days

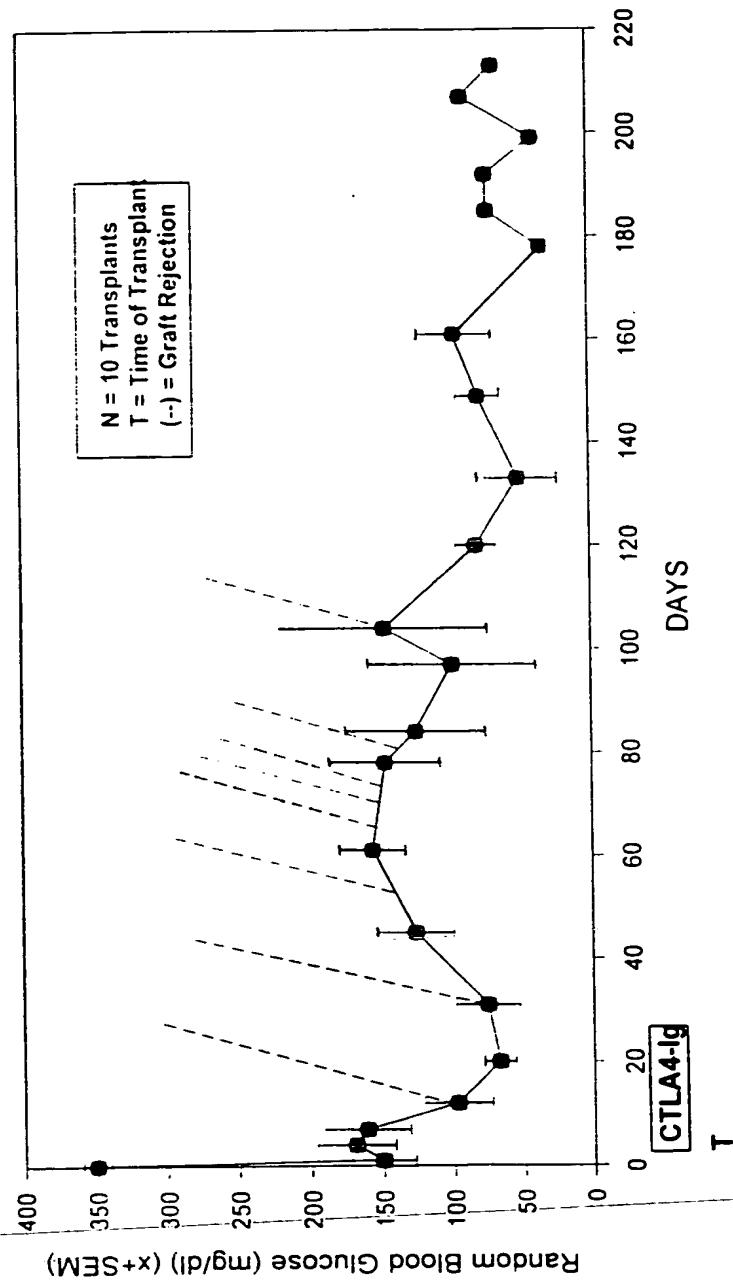
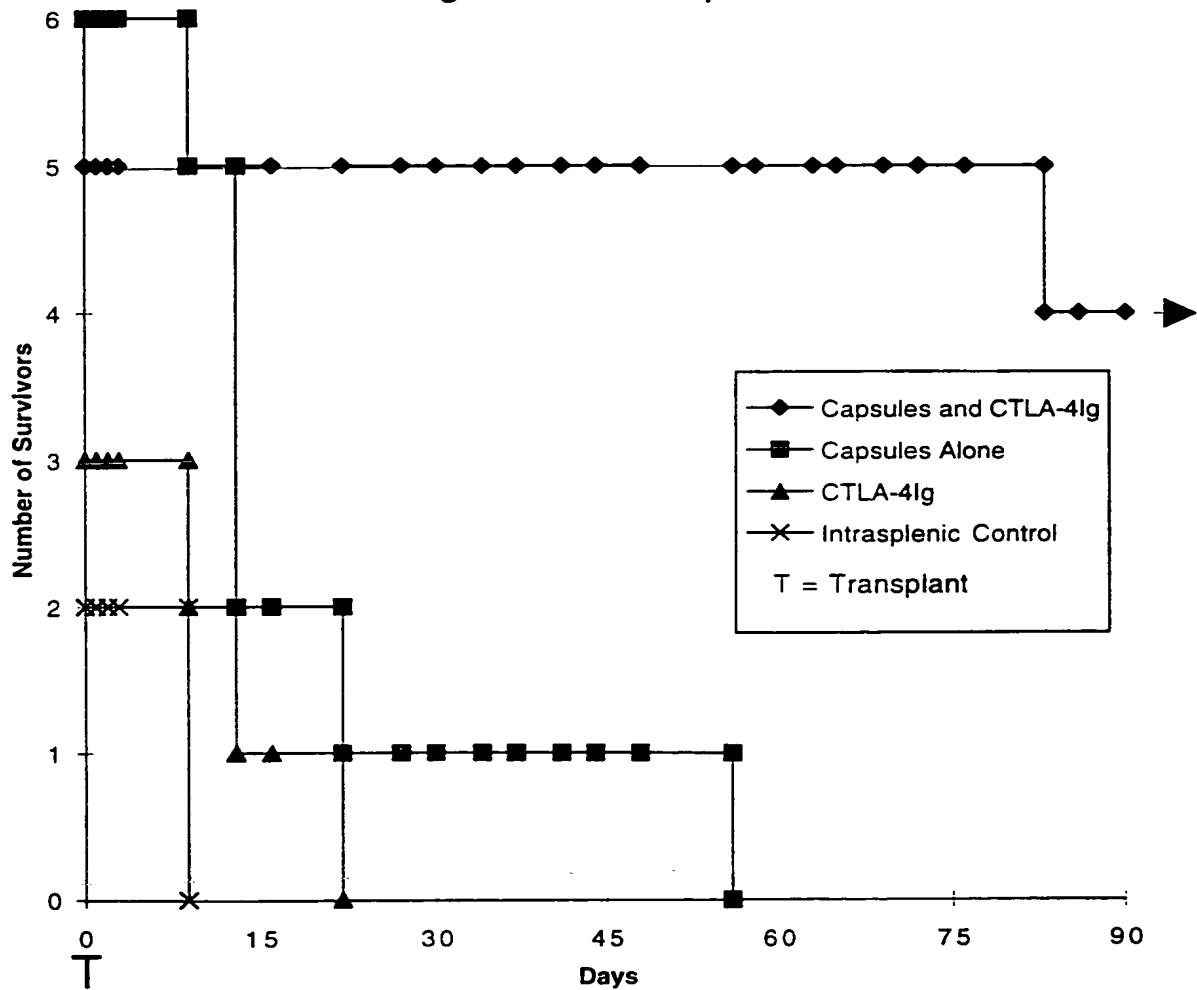
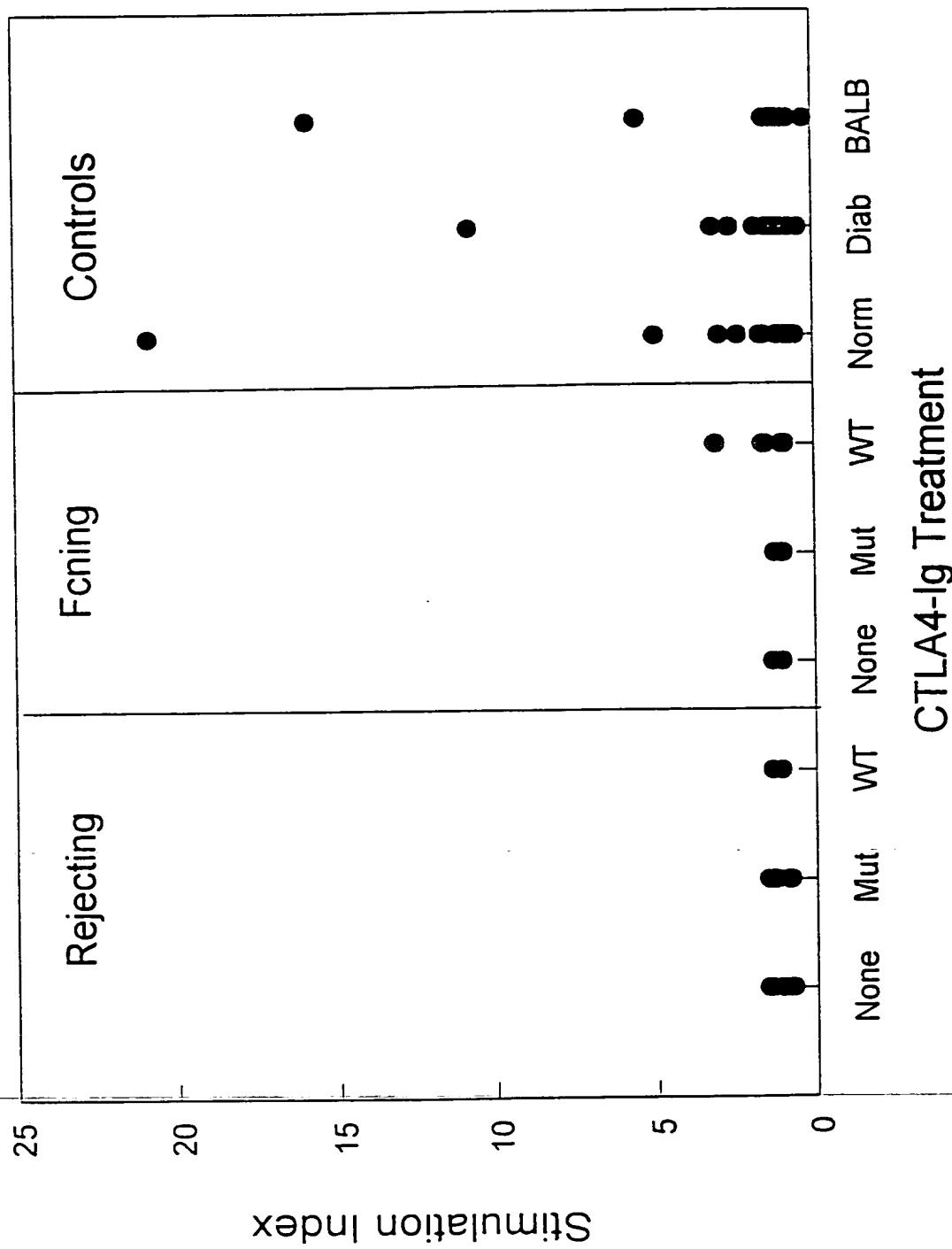


FIG. 36

**Neonatal Porcine Islet Xenografts in NOD Mice: Effects of  
CTLA-4Ig and Microencapsulation**



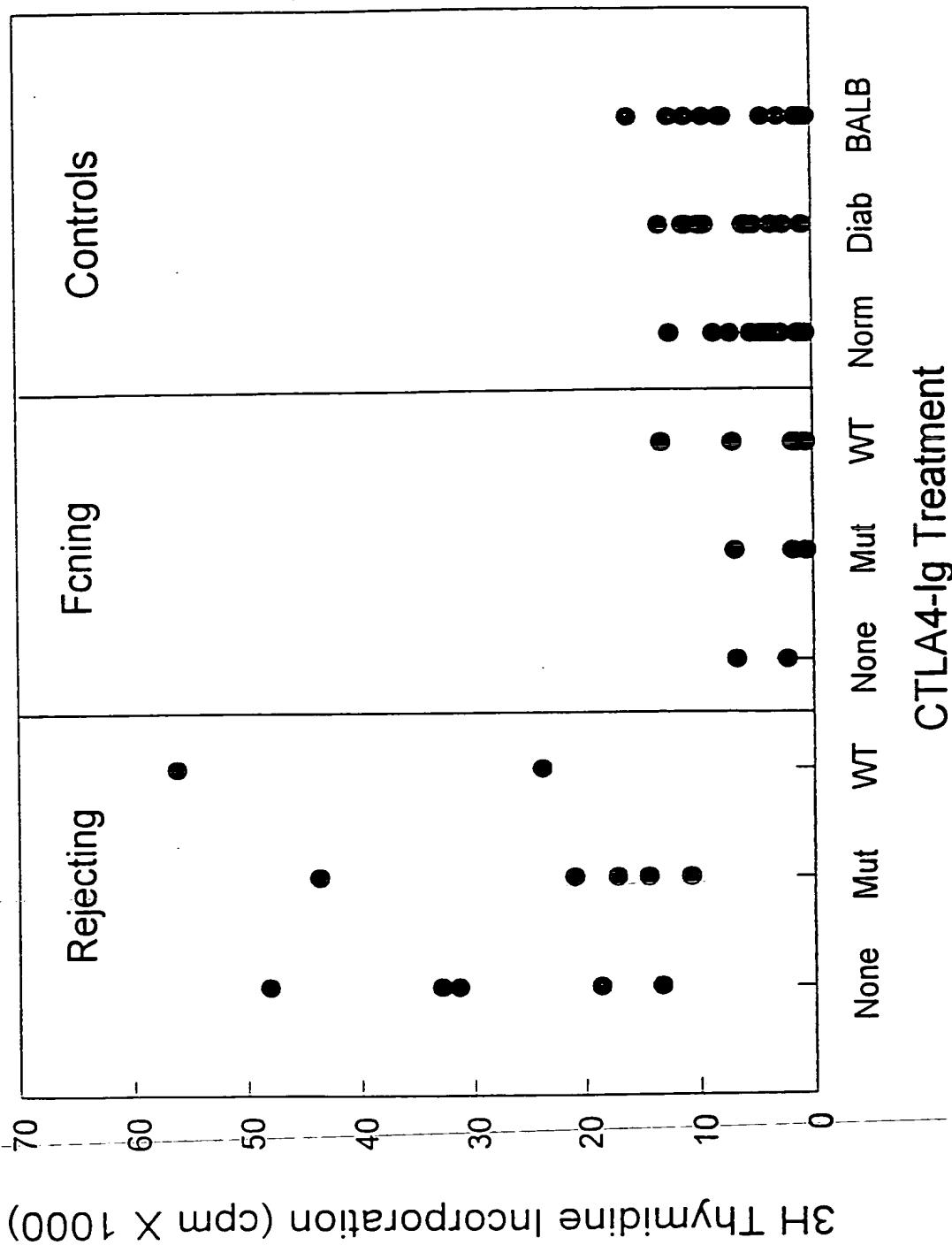
**FIG. 37** Islet-specific proliferation by SPC from NODs with rejected or functioning grafts



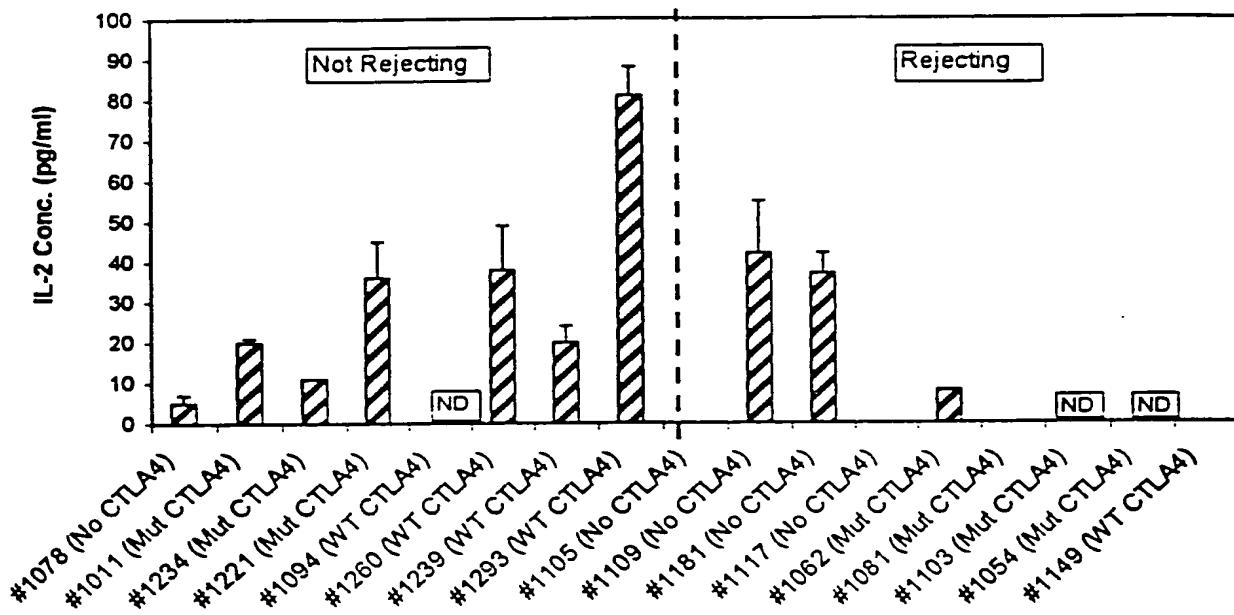
38  
FIG.

## Spontaneous Proliferation by SPC from NODs with rejected or functioning grafts

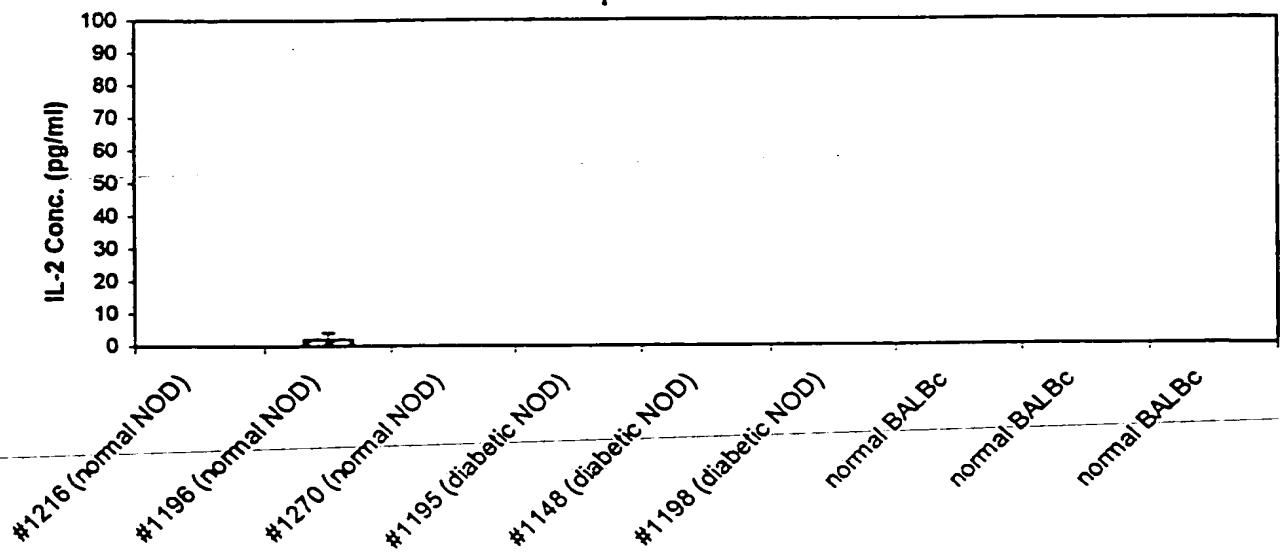
36/56



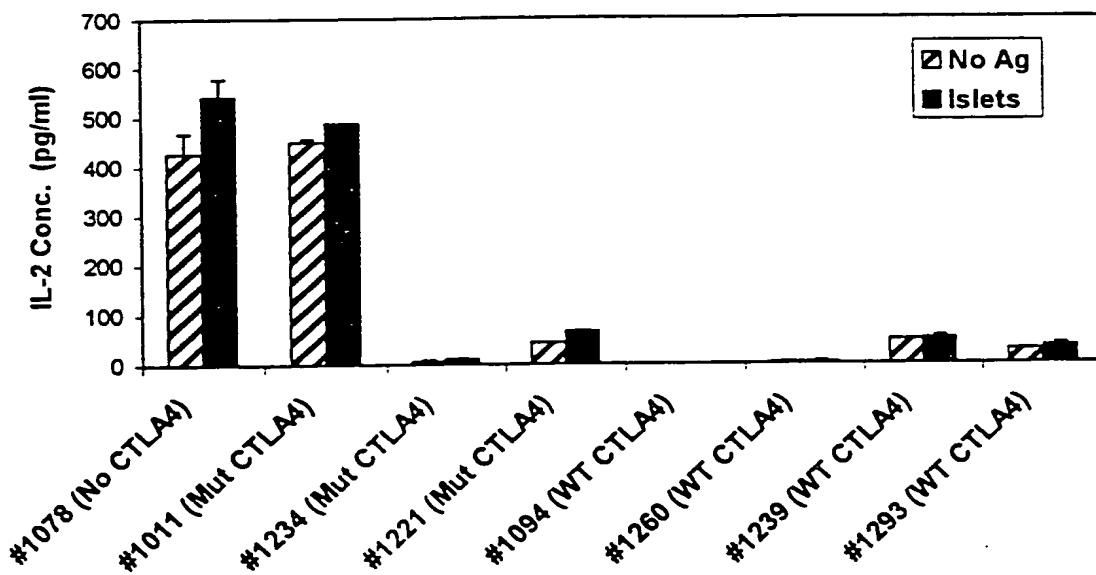
**FIG. 39A** IL-2 present in peritoneal fluid on sac day  
Transplanted NODs



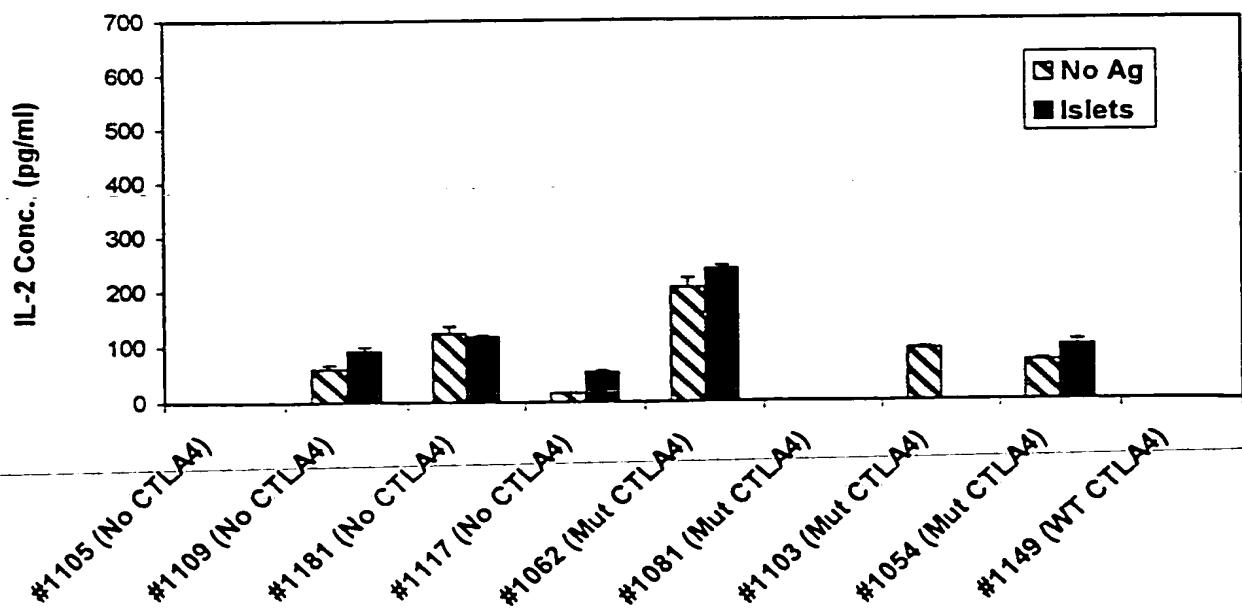
**FIG. 39B** IL-2 present in peritoneal fluid on sac day  
Untransplanted mice



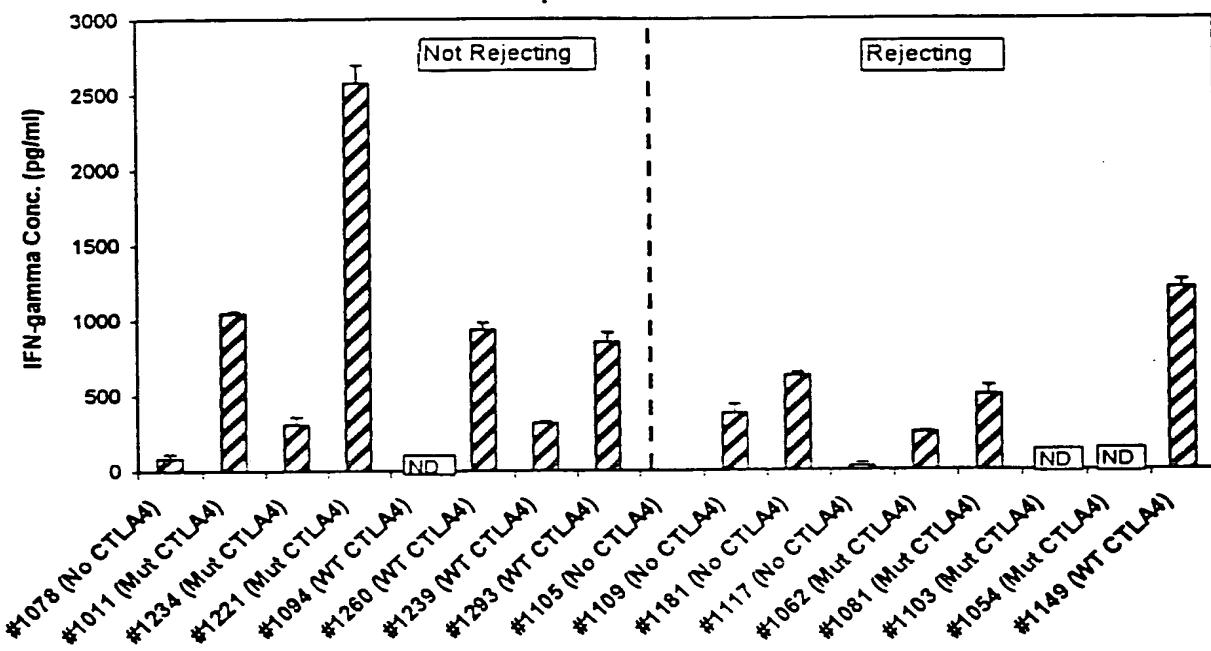
**FIG. 40A** IL-2 secreted by SPC cultured with porcine islets  
Transplanted NODs - Not Rejecting



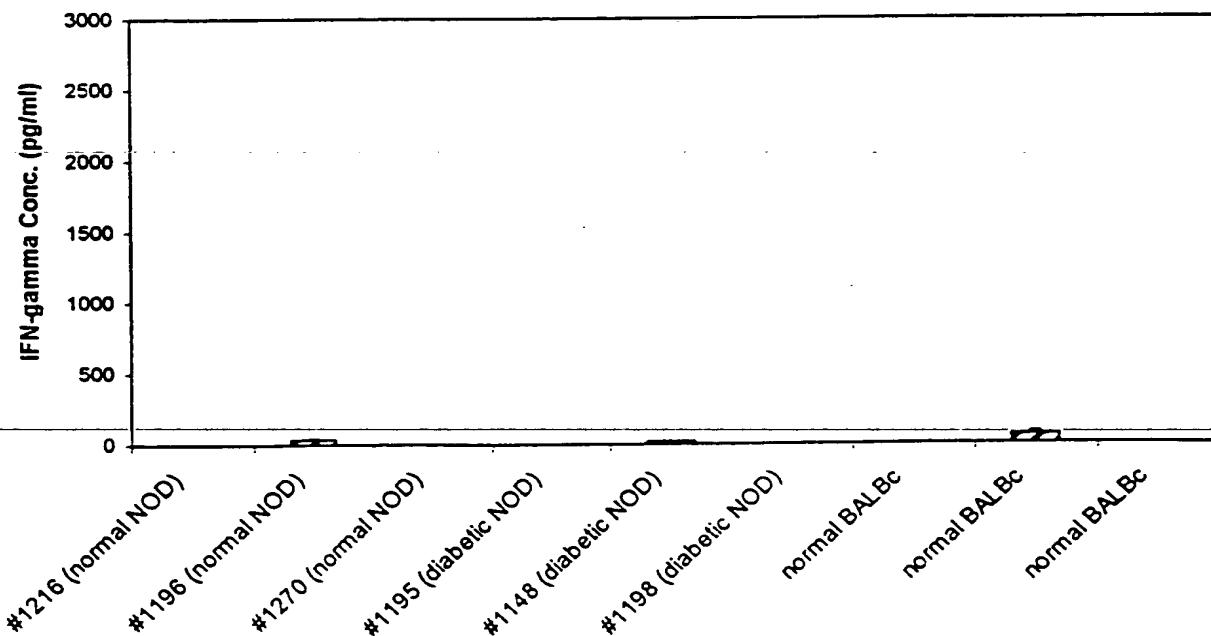
**FIG. 40B** IL-2 secreted by SPC cultured with porcine islets  
Transplanted NODs - Rejecting



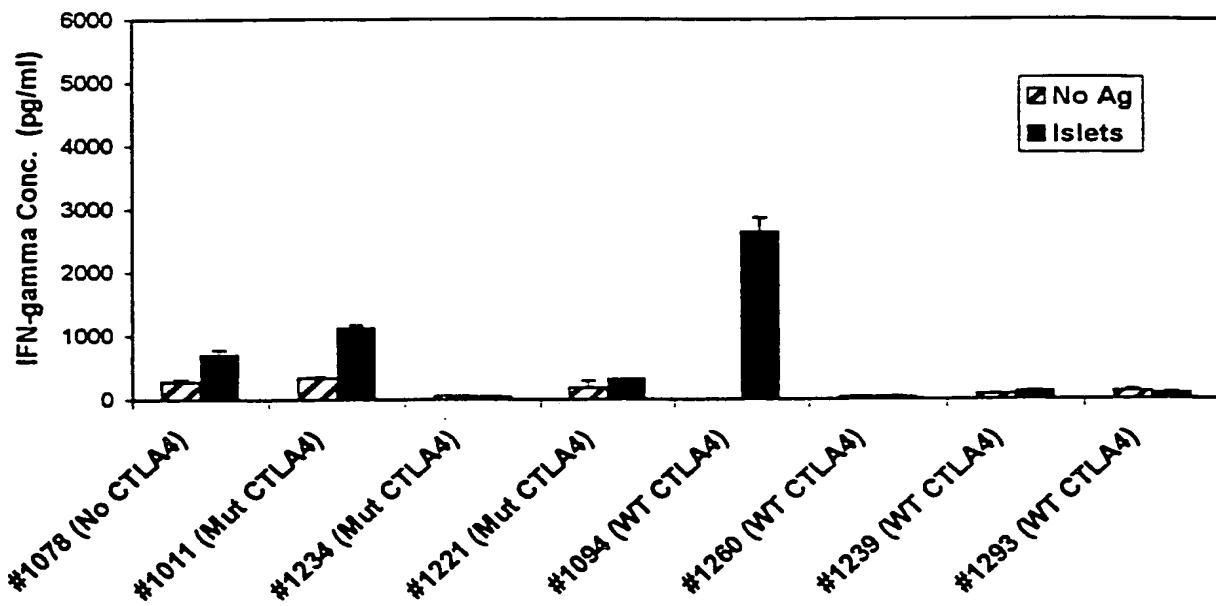
**FIG. 41A** IFN-gamma present in peritoneal fluid on sac day  
Transplanted NODs



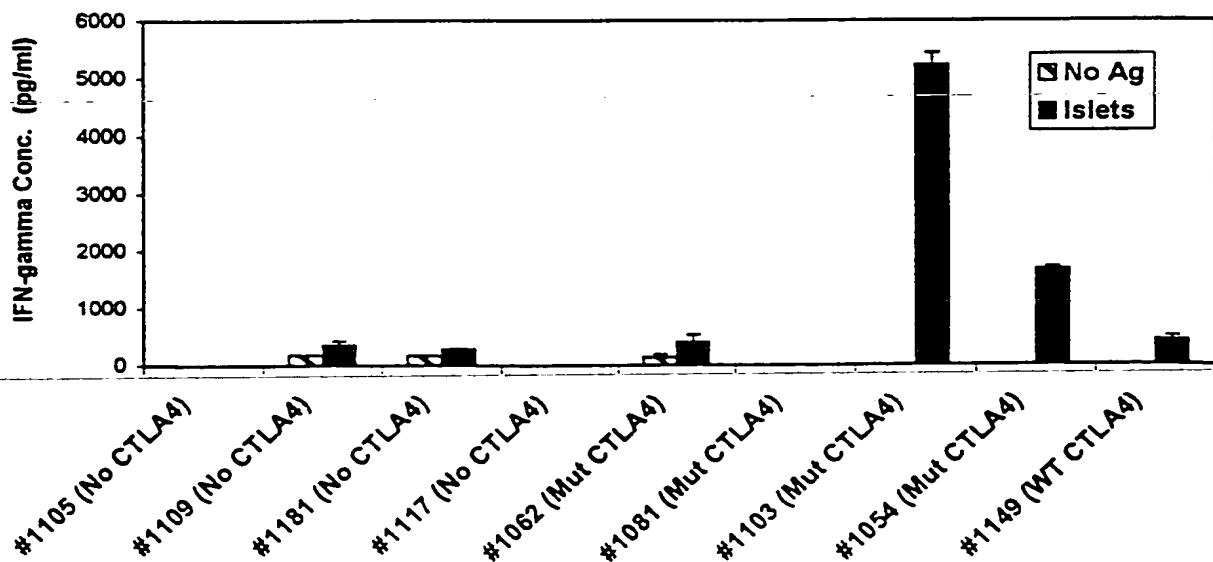
**FIG. 41B** IFN-gamma present in peritoneal fluid on sac day  
Untransplanted mice



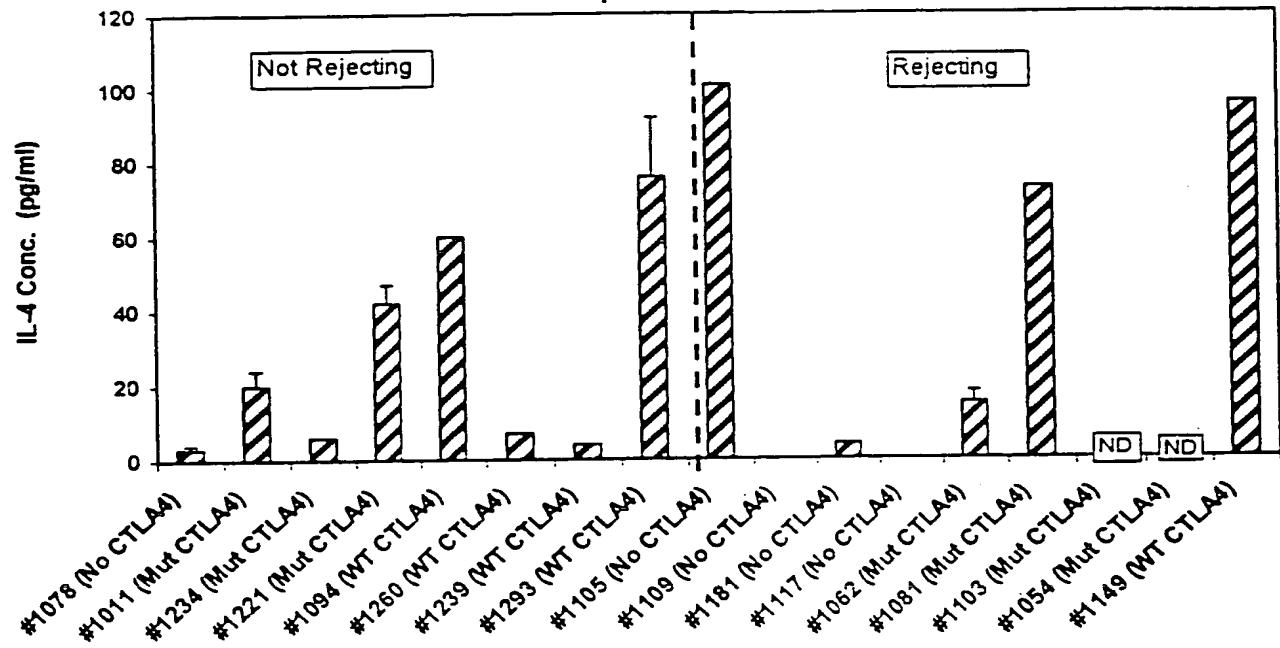
**FIG. 42A** IFN gamma secreted by SPC cultured with porcine islets  
Transplanted NODs - Not Rejecting



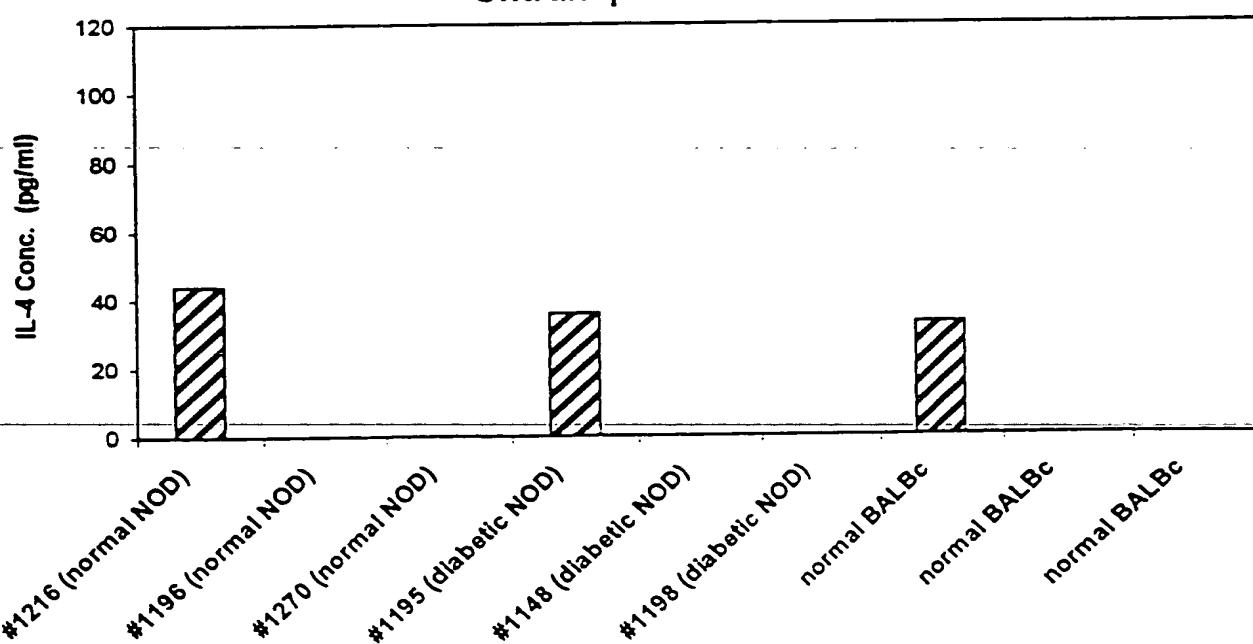
**FIG. 42B** IFN-gamma secretion by SPC cultured with porcine islets  
Transplanted NODs - Rejecting



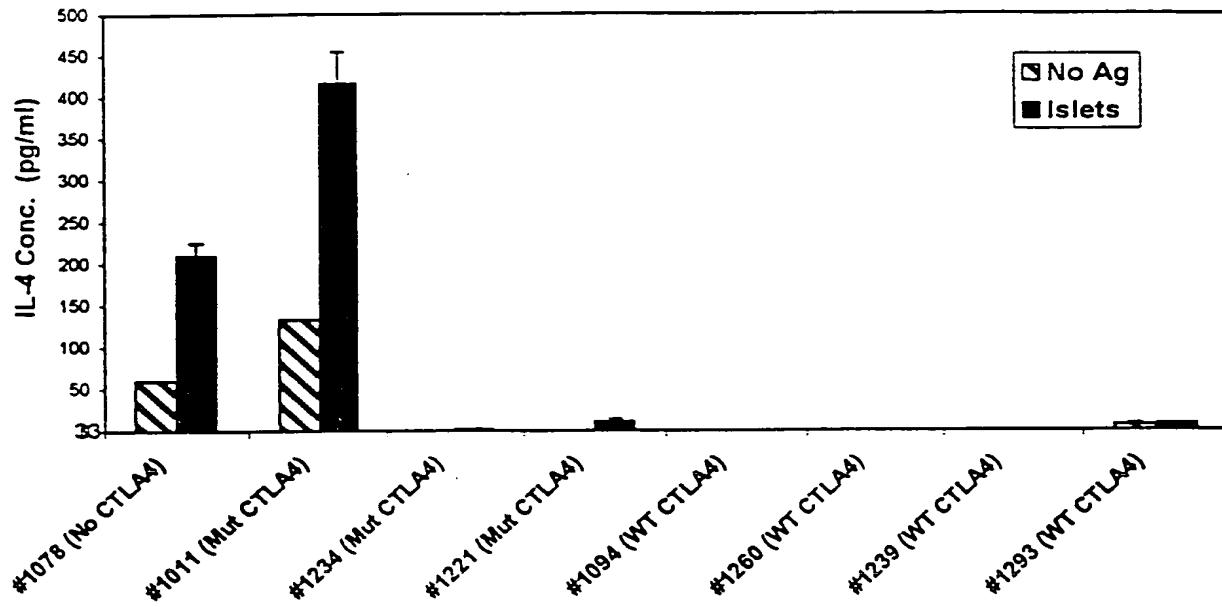
**FIG. 43A** IL-4 present in peritoneal fluid on sac day  
Transplanted NODs



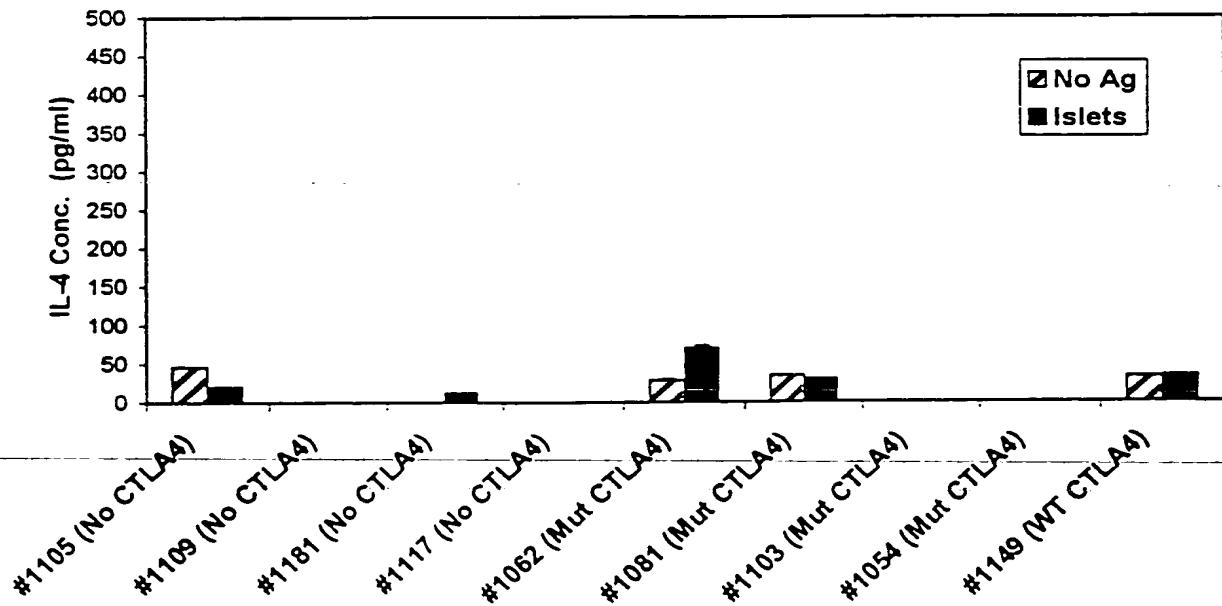
**FIG. 43B** IL-4 present in peritoneal fluid on sac day  
Untransplanted mice



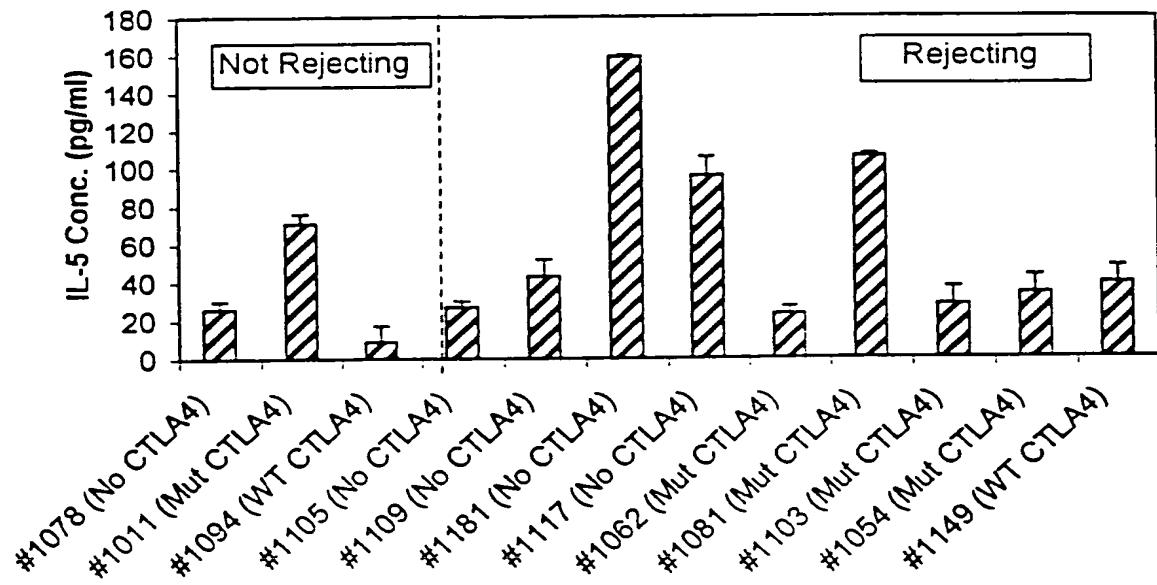
**FIG. 44A** IL-4 secreted by SPC cultured with porcine islets  
Transplanted NODs - Not Rejecting



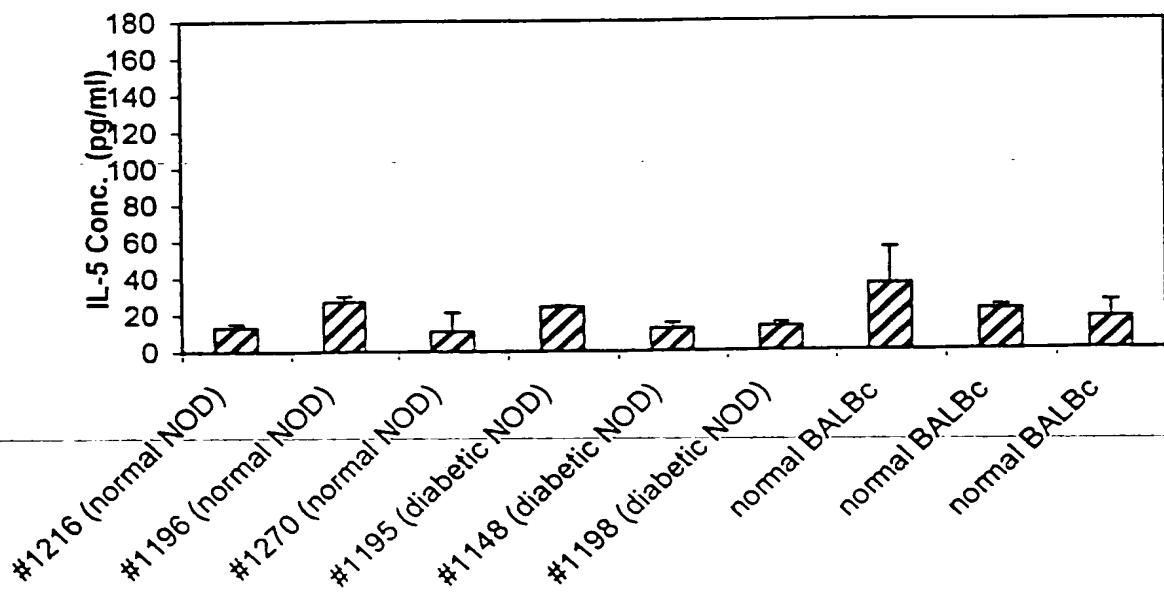
**FIG. 44B** IL-4 secreted by SPC cultured with porcine islets  
Transplanted NODs - Rejecting



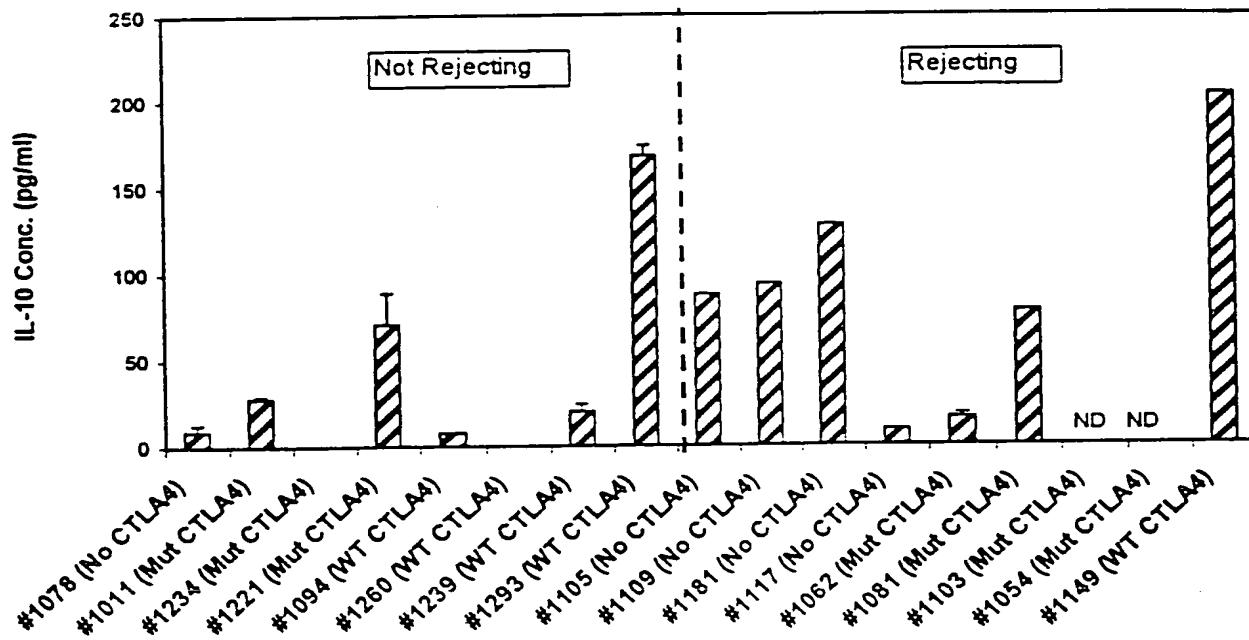
**FIG. 45A** IL-5 present in peritoneal fluid on sac day  
Transplanted NODs



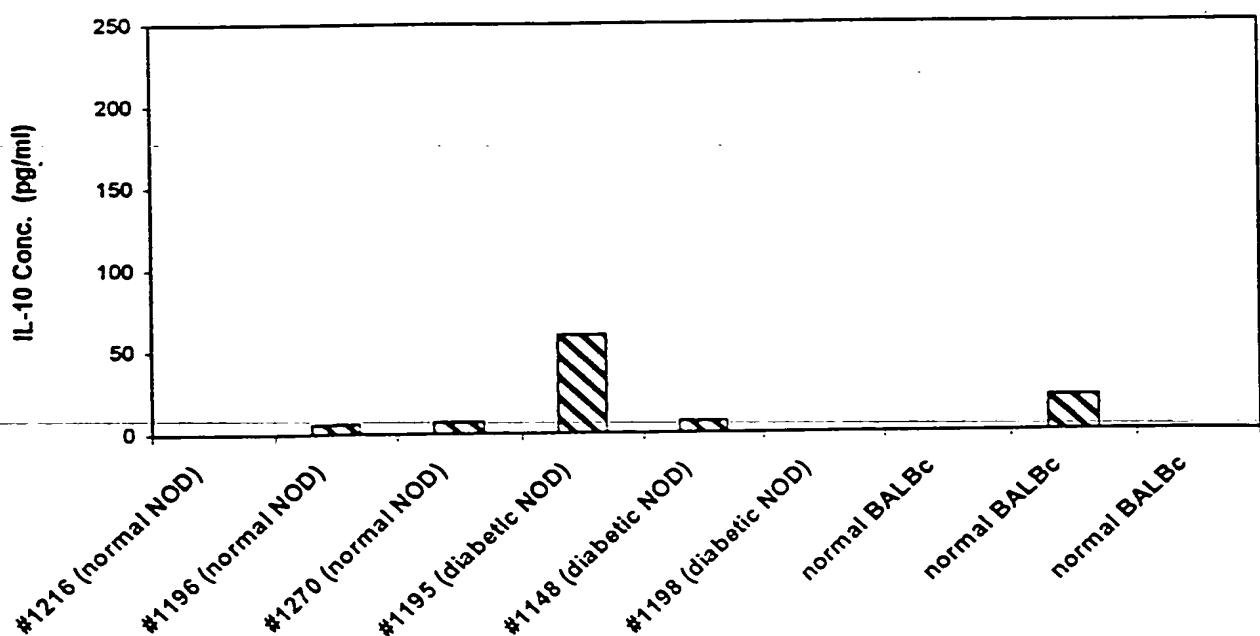
**FIG. 45B** IL-5 present in peritoneal fluid on sac day  
Untransplanted mice



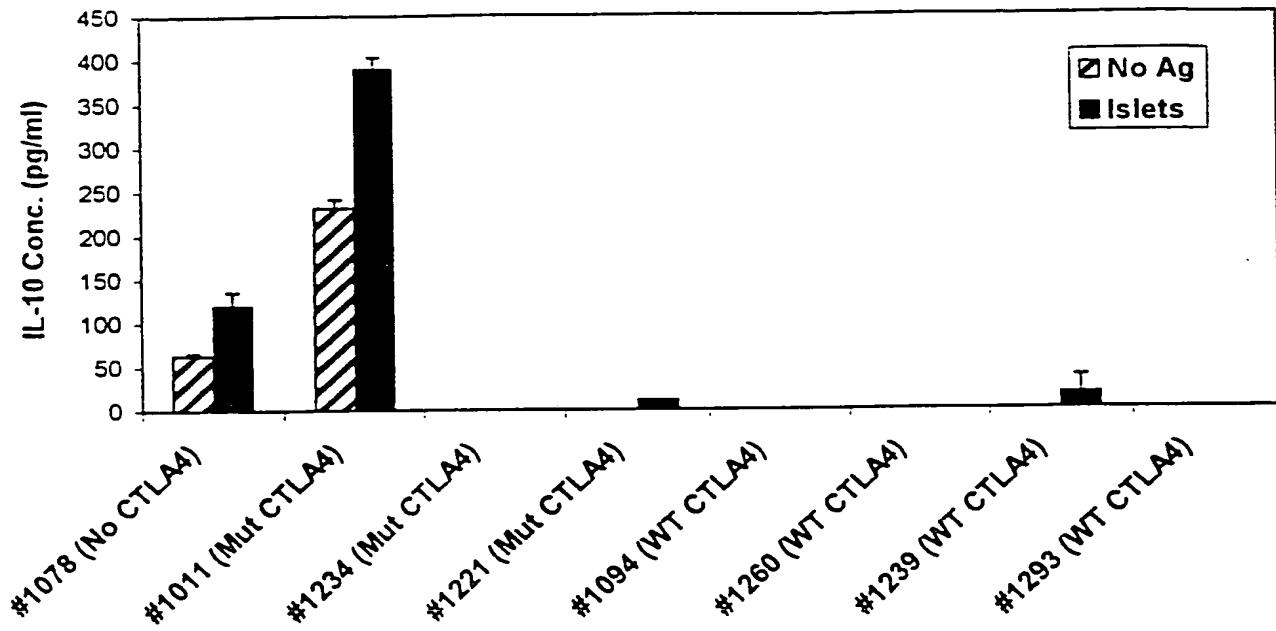
**FIG. 46A** IL-10 present in peritoneal fluid on sac day  
Transplanted NODs



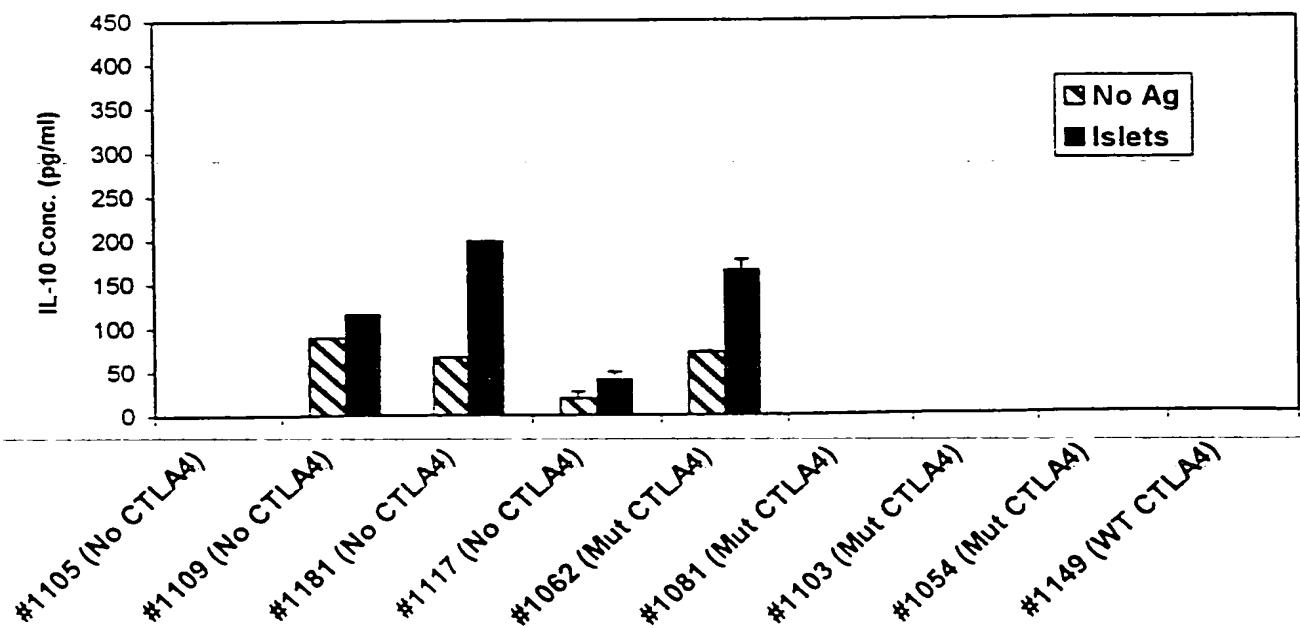
**FIG. 46B** IL-10 present in peritoneal fluid on sac day  
Untransplanted mice



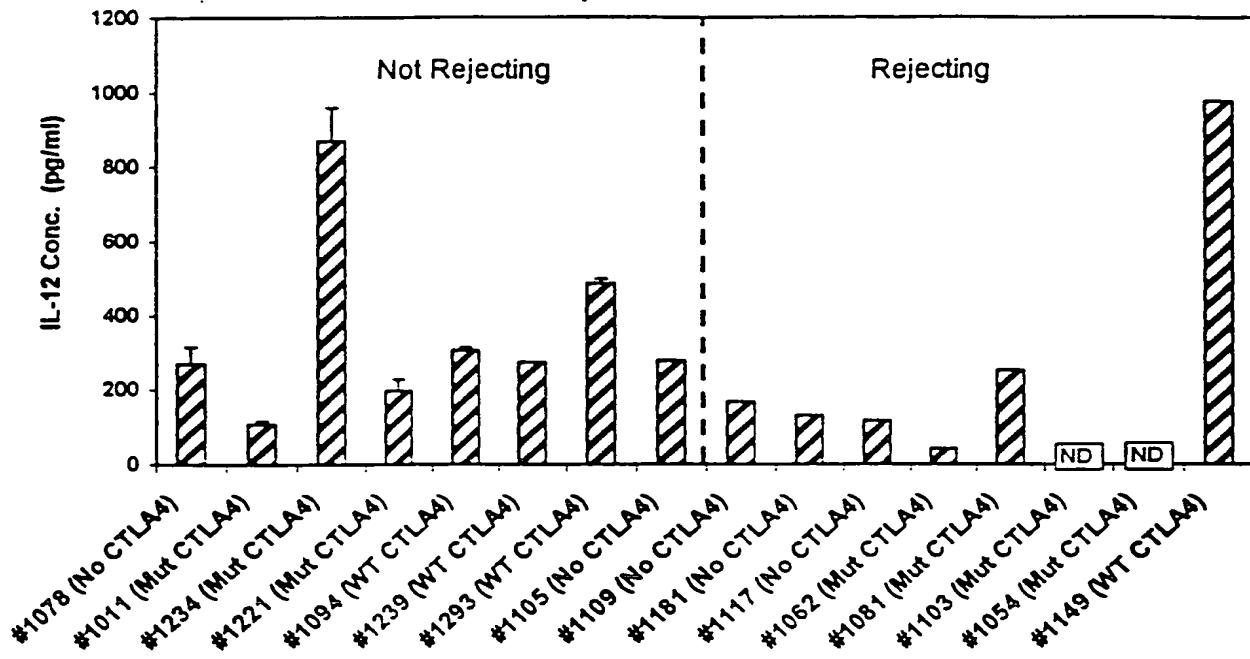
**FIG. 47A** IL-10 secreted by SPC cultured with porcine islets  
Transplanted NODs - Not Rejecting



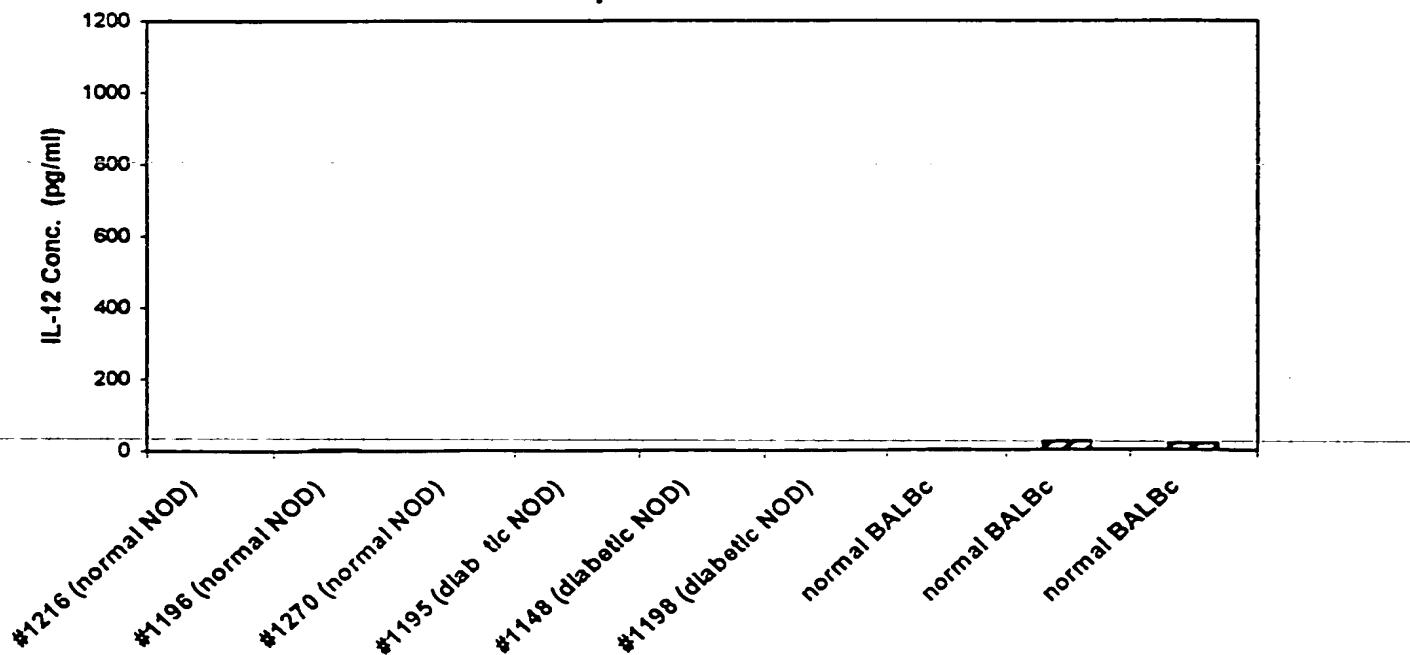
**FIG. 47B** IL-10 secreted by SPC cultured with porcine islets  
Transplanted NODs - Rejecting



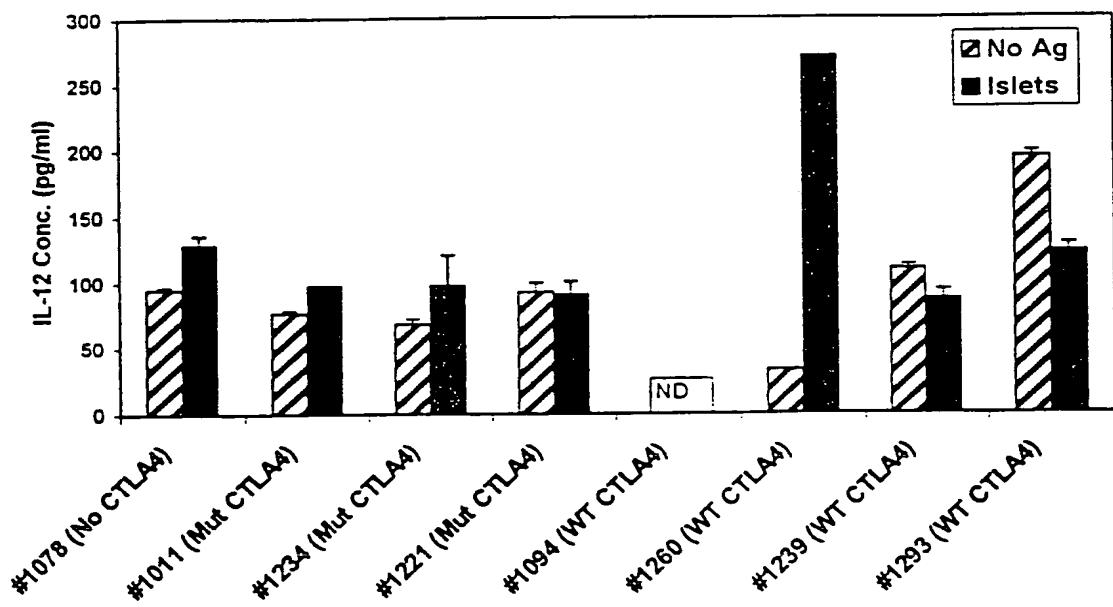
**FIG. 48A** IL-12 present in peritoneal fluid on sac day  
Transplanted NODs



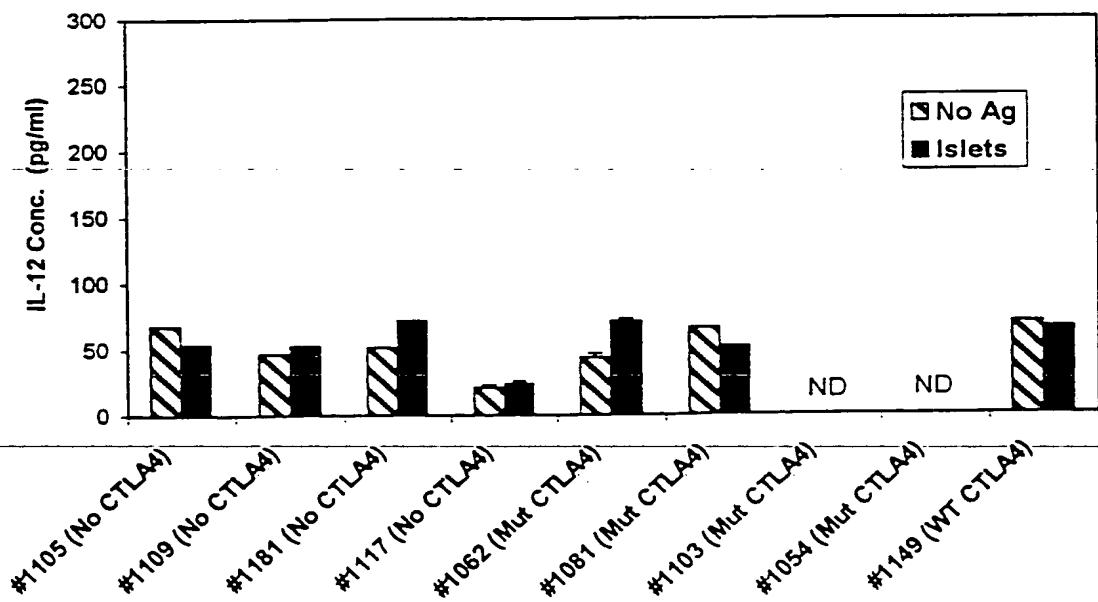
**FIG. 48B** IL-12 present in peritoneal fluid on sac day  
Untransplanted mice



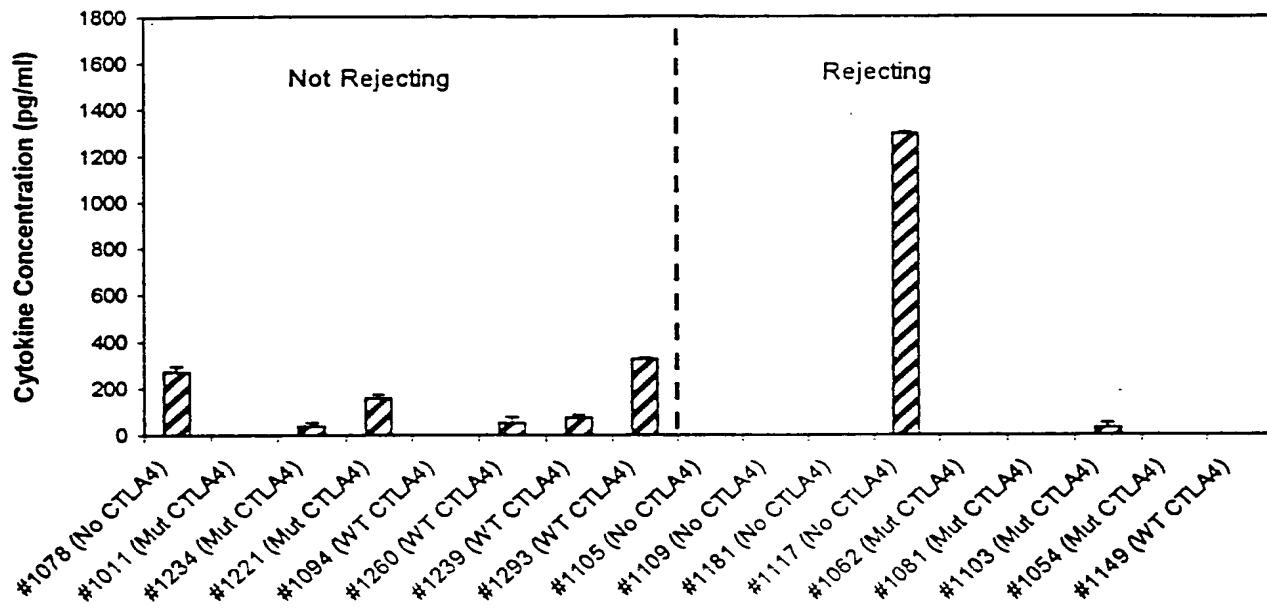
**FIG. 49A** IL-12 secreted by SPC cultured with porcine islets  
Transplanted NODs - Not Rejecting



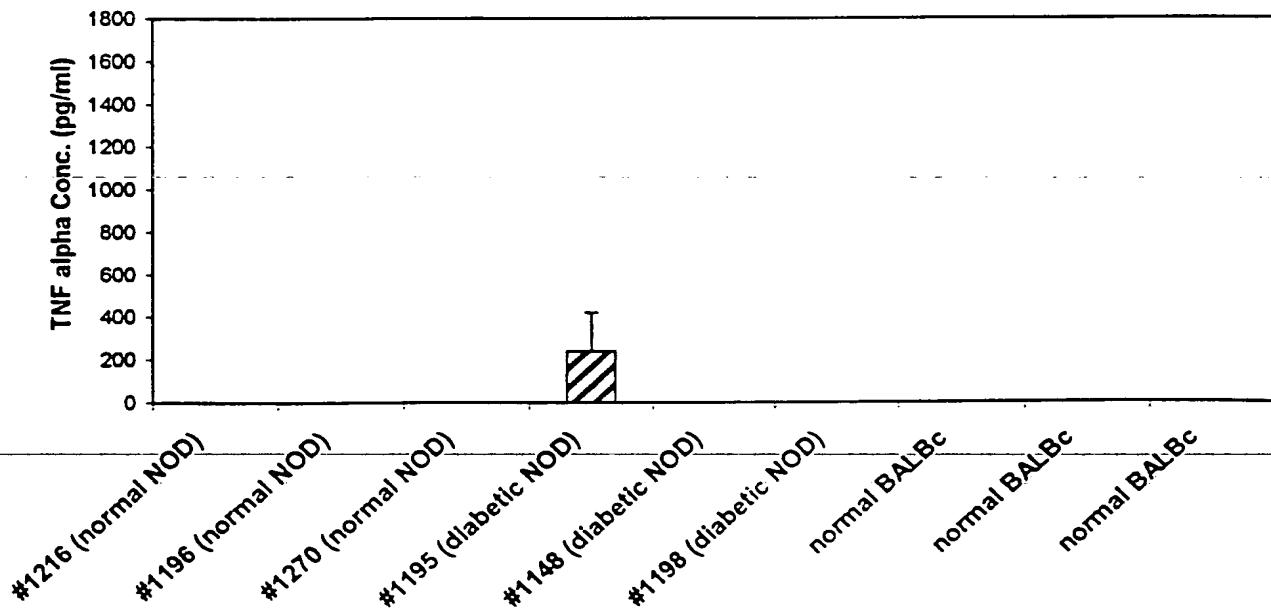
**FIG. 49B** IL-12 secreted by SPC cultured with porcine islets  
Transplanted NODs - Rejecting



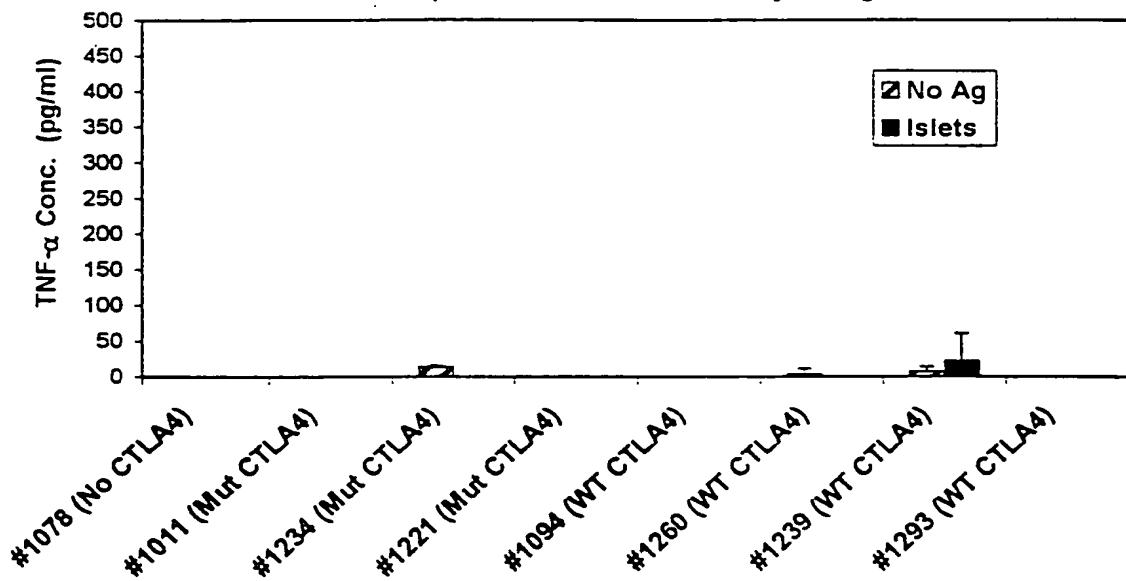
**FIG. 50A** TNF alpha present in peritoneal fluid on sac day  
Transplanted NODs



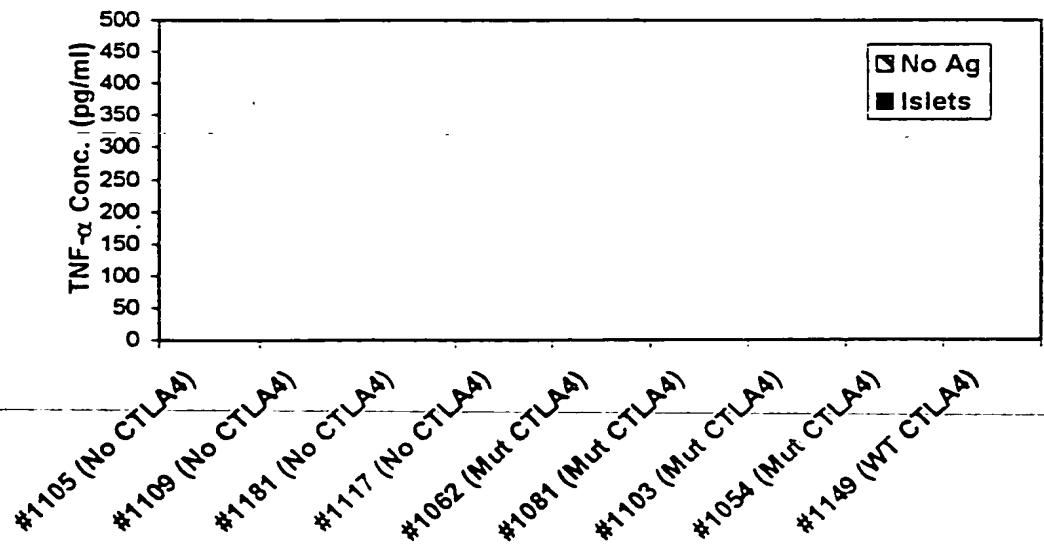
**FIG. 50B** TNF alpha present in peritoneal fluid on sac day  
Untransplanted NODs



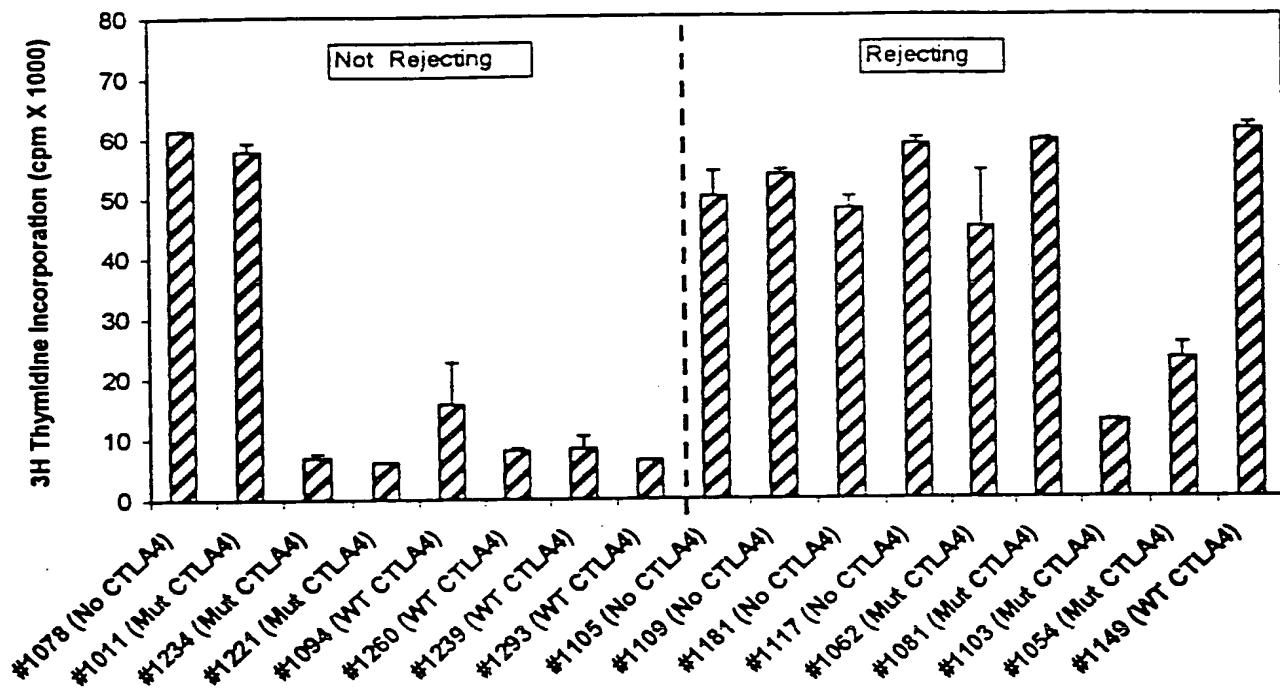
**FIG. 51A** TNF- $\alpha$  secreted by SPC cultured with porcine islets  
Transplanted NODs - Not Rejecting



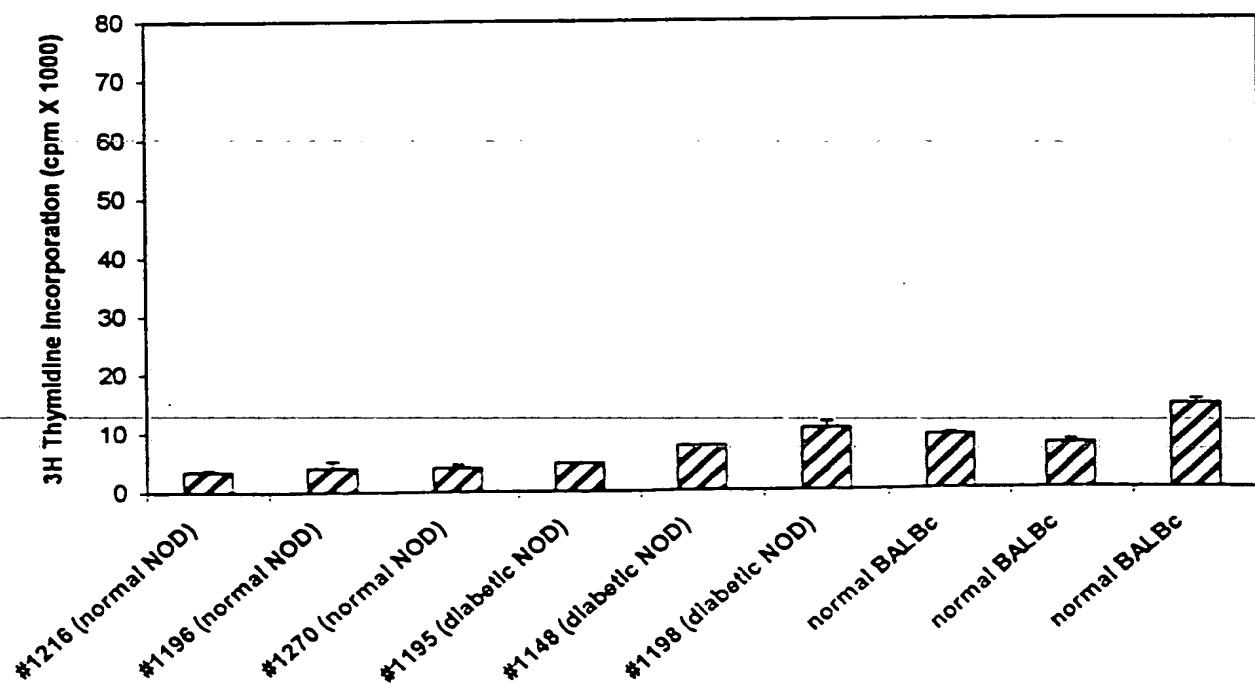
**FIG. 51B** TNF- $\alpha$  secreted by SPC cultured with porcine islets  
Transplanted NODs - Rejecting



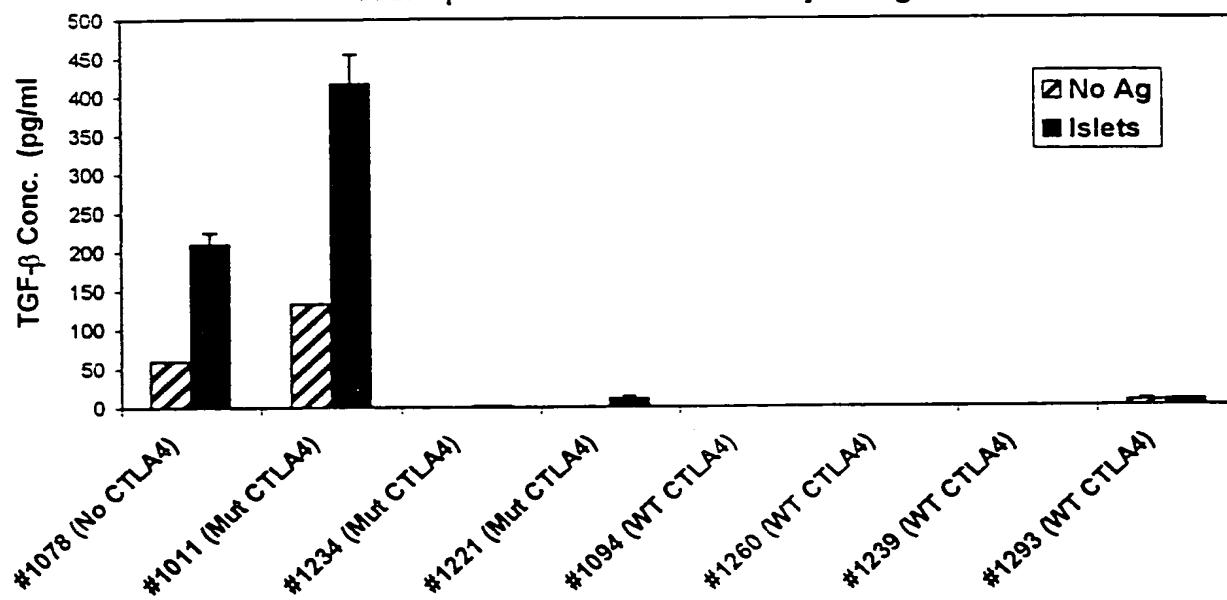
**FIG. 52A** TGF beta present in peritoneal fluid on sac day  
Transplanted NODs



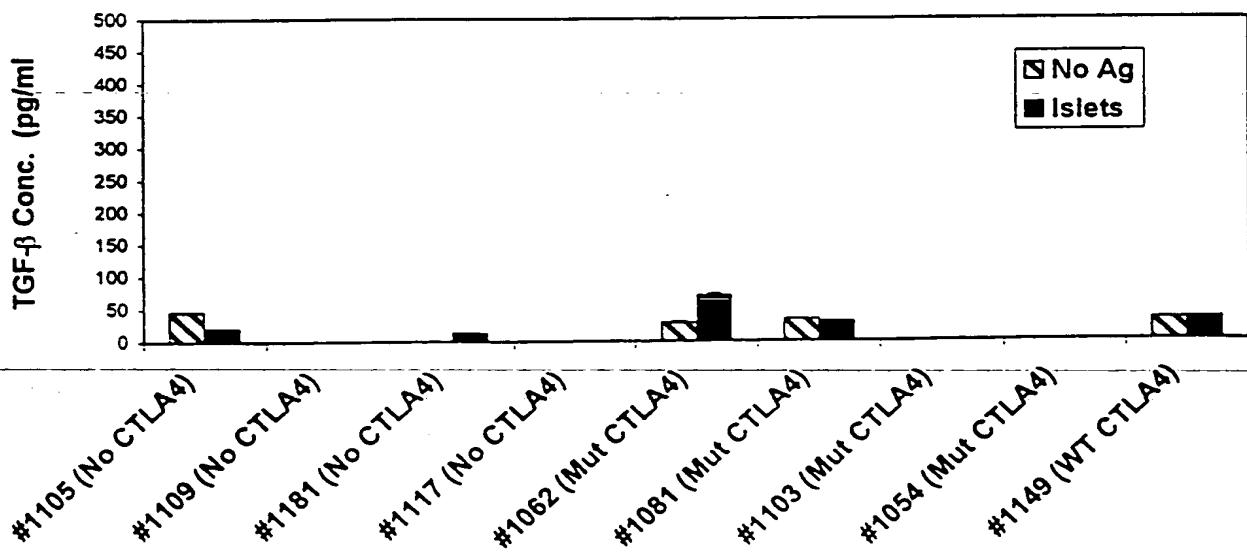
**FIG. 52B** TGF beta present in peritoneal fluid on sac day  
Untransplanted mice



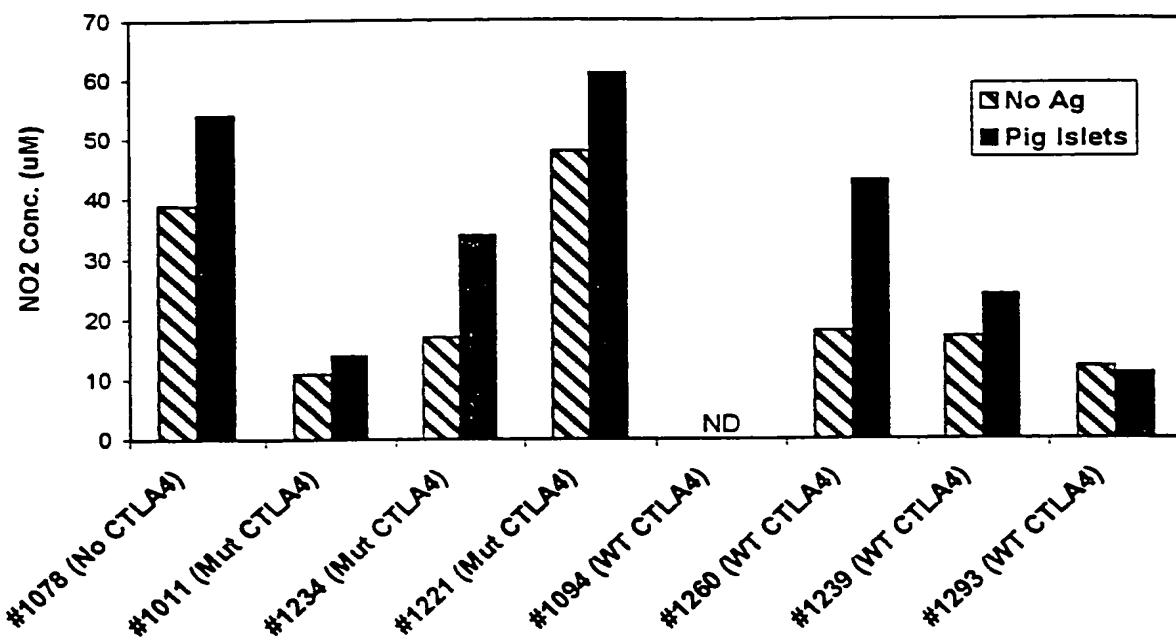
**FIG. 53A** TGF- $\beta$  secreted by SPC cultured with porcine islets  
Transplanted NODs - Not Rejecting



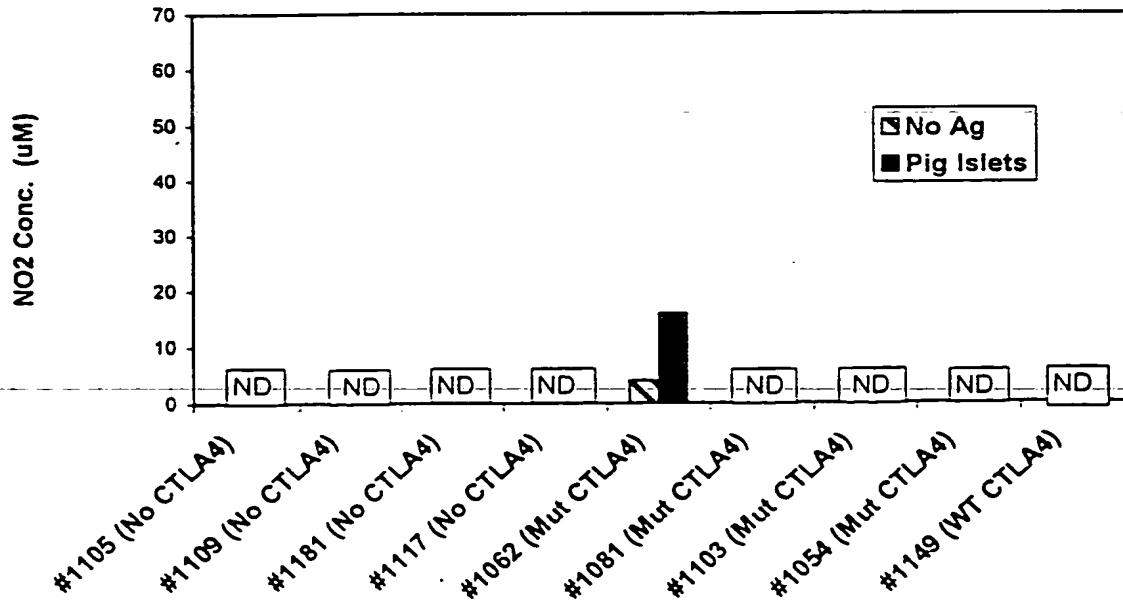
**FIG. 53B** TGF- $\beta$  secreted by SPC cultured with porcine islets  
Transplanted NODs - Rejecting



**FIG. 54A** NO<sub>2</sub> produced by SPCs cultured with pig islets  
Transplanted NODs - Not Rejecting

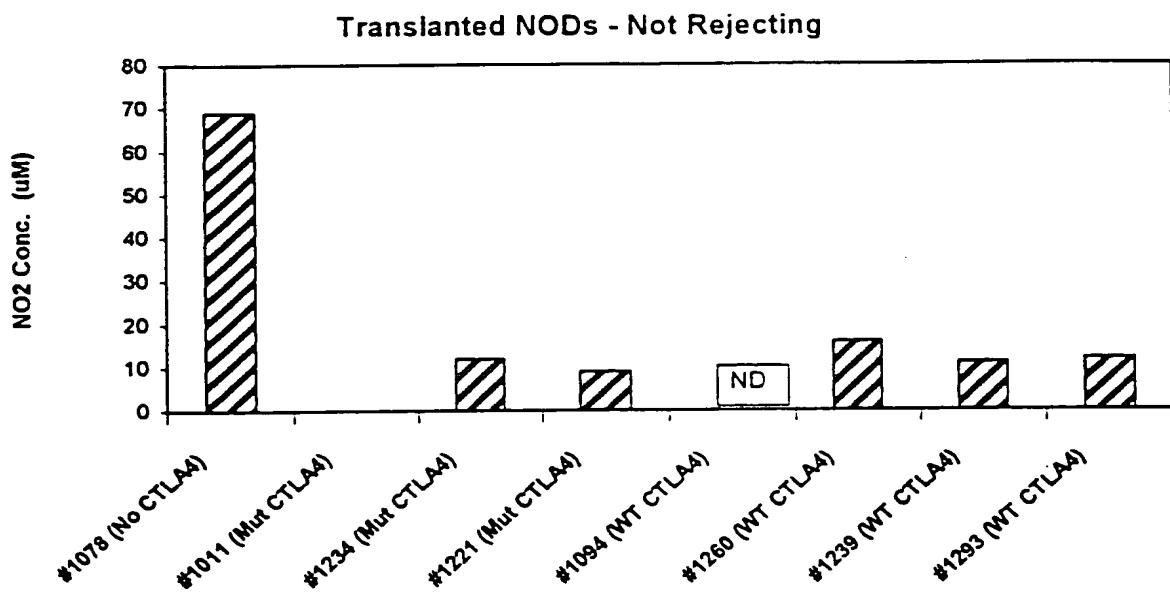


**FIG. 54B** Transplanted NODs - Rejecting

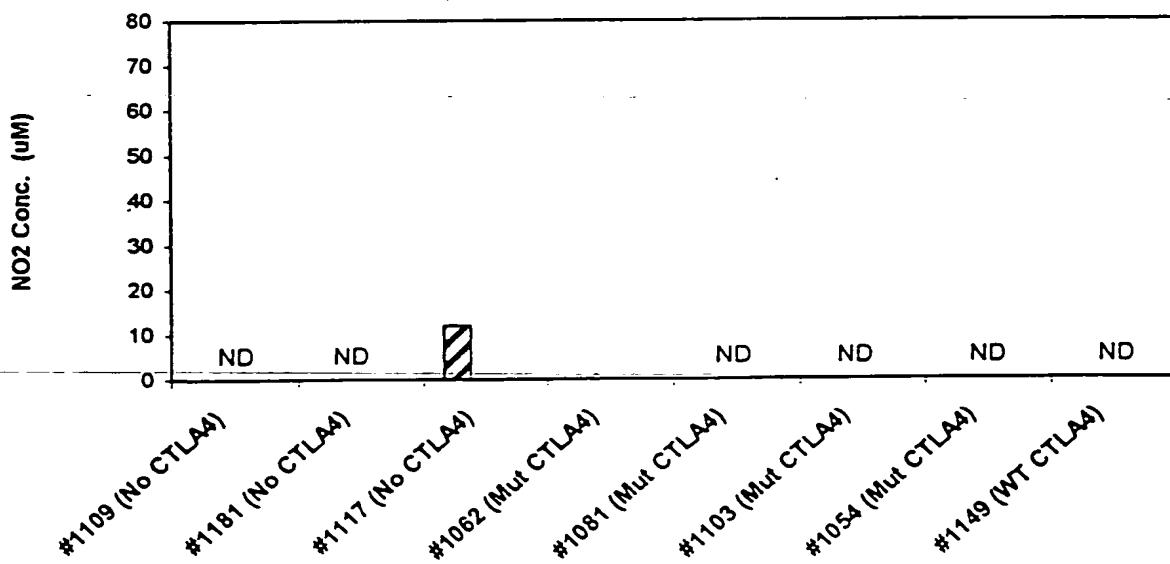


**FIG. 55A**

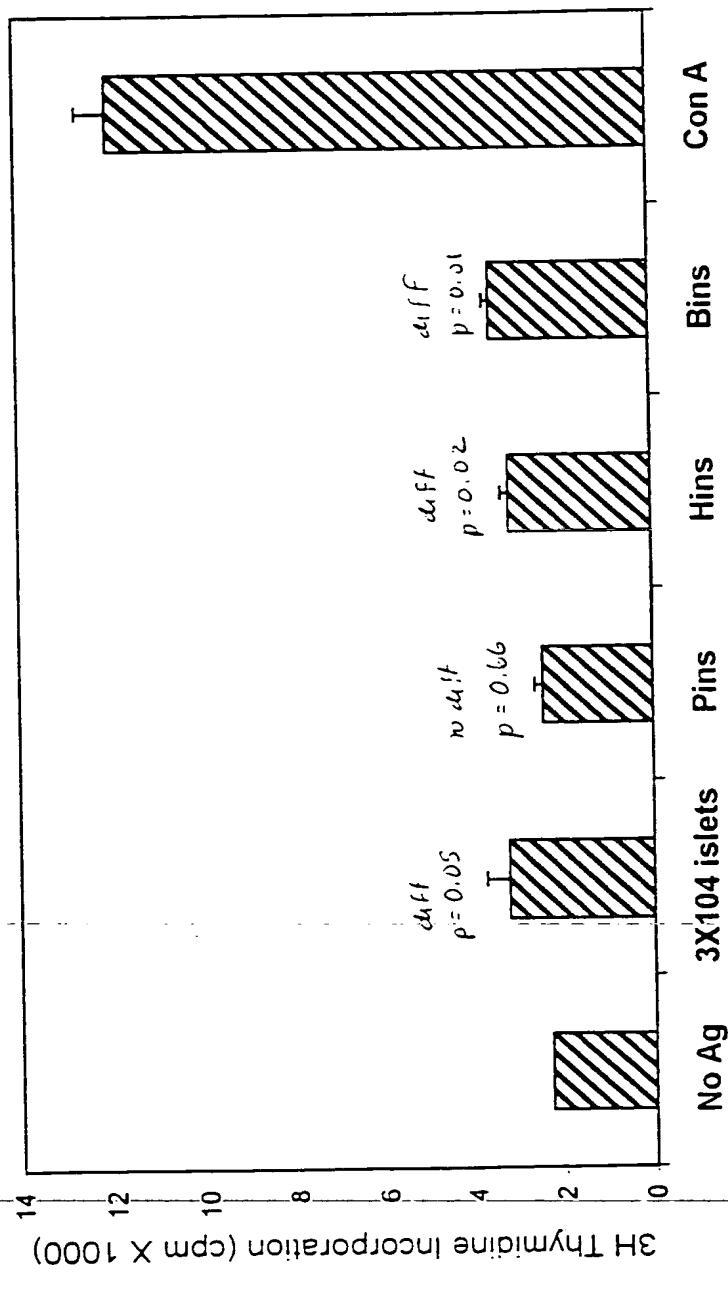
NO<sub>2</sub> produced by PECs after 96 hr in culture  
with original encapsulated porcine islets

**FIG. 55B**

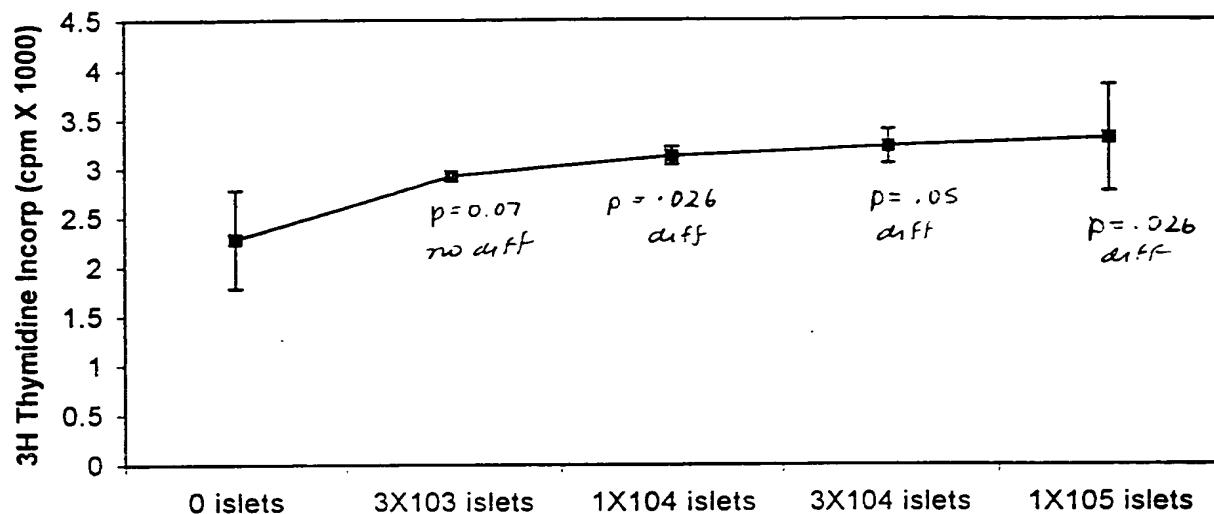
Transplanted NODs - Rejecting



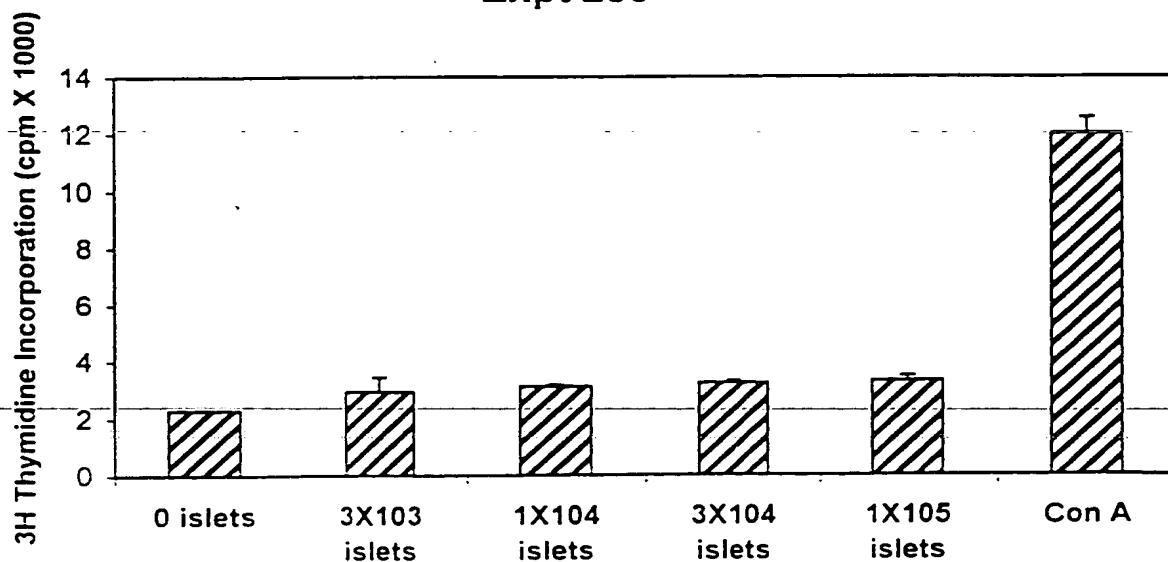
**FIG. 56**  
**Proliferation of SPC from NOD #11335 to pig islets or insulin  
 (Expt 288)**



**FIG. 57A** Proliferation of SPC from NOD #1335 to pig islet cells in vitro (Expt 288)



**FIG. 57B** Proliferation of SPC from NOD #1335 Expt 288



56/56

FIG. 58 NO<sub>2</sub> Production by Cells from NOD #1335 (Expt 288)

